



MassDEP RTN 3-23246

Phase V Status Report No. 28 and Remedial Monitoring Report No. 43

50 Tufts Street, Somerville, Massachusetts

Submitted to:

UniFirst Corporation
68 Jonspin Road
Wilmington, MA 01887

Submitted by:

GEI Consultants, Inc.
400 Unicorn Park Drive
Woburn, MA 01801
781.721.4000

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Christopher O. Coner, CHMM
Project Manager

Ileen S. Gladstone, P.E., LSP, LEED AP
Senior Vice President

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Acronyms and Abbreviations

µg/L	micrograms per liter
µg/m ³	Micrograms per cubic meter
AUL	Activity and Use Limitation
CEP	Critical Exposure Pathway
COPC	Compounds of Potential Concern
CRA	Comprehensive Remedial Action
CSA	Comprehensive Site Assessment
DNAPL	Dense non-aqueous phase liquid
EPA	U.S. Environmental Protection Agency
EPMM	Exposure Pathway Mitigation Measure
FIR	Final Inspection Report
GEI	GEI Consultants, Inc.
GLX	Green Line Extension
IH	Imminent Hazard
IRA	Immediate Response Action
lbs	Pounds
LQG	Large Quantity Generator
LSP	Licensed Site Professional
MassDEP	Massachusetts Department of Environmental Protection
MBTA	Massachusetts Bay Transportation Authority
MCP	Massachusetts Contingency Plan
MNA	Monitored Natural Attenuation
NAPL	Non-aqueous phase liquid
NSR	No Significant Risk
OHM	oil and/or Hazardous Material
OMM	Operation, Maintenance, and Monitoring
PCE	Tetrachloroethylene (perchloroethylene)
PSS	Permanent Solution Statement
RAM	Release Abatement Measure
RAO	Response Action Outcome
RAP	Remedial Action Plan
RIP	Remedy Implementation Plan
RMR	Remedial Monitoring Report
ROS	Remedy Operations Status
RTN	Release Tracking Number
SHE	Substantial Hazard Evaluation
SSDS	Sub-slab Depressurization System
SVE	Soil Vapor Extraction
TCA	1,1,1-trichloroethane
TCE	Trichloroethylene
VOC	Volatile Organic Compound

Executive Summary

On behalf of UniFirst Corporation (UniFirst) of Wilmington, Massachusetts, GEI Consultants, Inc. (GEI) prepared this Phase V Status Report No. 28 and Remedial Monitoring Report (RMR) No. 43 for the site located at 50 Tufts Street in Somerville, Massachusetts (the Site). The Site is identified by Massachusetts Department of Environmental Protection (MassDEP) Release Tracking Number (RTN) 3-23246. The Site includes the 50 Tufts Street property (the Property), other properties in the neighborhoods east and immediately north, south, and west of the Property, and the Michael E. Capuano Early Childhood Center (Capuano Center) located at 150 Glen Street in Somerville, Massachusetts. The Site has been in Phase V since 2011. This Phase V Status Report No. 27 covers the period from December 15, 2024, to June 15, 2025.

E.S.1. Background

From approximately 1955 to 2002, the Property was used for storage and distribution of industrial chemicals, laundry supplies, and dry-cleaning supplies. Chemicals stored at, and transported to and from the Property, included chlorinated volatile organic compounds (VOCs). These chlorinated VOCs – particularly tetrachloroethylene (also called perchloroethylene [PCE]), trichloroethylene (TCE), and 1,1,1-trichloroethane (TCA) – have been detected in soil, soil vapor, indoor air, and groundwater at the Property and are therefore the compounds of potential concern (COPCs) for the Site. In some buildings within the Site, chlorinated VOCs have been detected in indoor air samples.

The detection of chlorinated VOCs in indoor air at some buildings required the implementation of an Immediate Response Action (IRA). The “Immediate Response Action Plan” associated with RTN 3-23246 was submitted to MassDEP on January 9, 2006. The Site was classified as Tier IC (Permit No. W085813). The “Phase II Comprehensive Site Assessment (CSA), Method 3 Risk Characterization, and Phase III Remedial Action Plan (RAP)” (Phase II/III) for the Site was submitted to MassDEP on July 14, 2008. The “Phase IV Remedy Implementation Plan” (Phase IV RIP) was submitted to MassDEP on August 10, 2009. The “Immediate Response Action Completion Report and Remedial Monitoring Report No. 11” (IRAC Report) was submitted to MassDEP on November 13, 2009, and the “Immediate Response Action Completion Report Amendment” (IRAC Report Amendment) was submitted to MassDEP on April 1, 2011. The “Phase IV Final Inspection Report, Remedial Monitoring Report No. 15, and Phase V Remedy Operation Status Report” (Phase IV FIR/Phase V ROS) was submitted to MassDEP on August 4, 2011. The Site was reclassified as Tier II on August 1, 2014, and a Tier Classification Extension was submitted on May 9, 2025.

The remedial action alternative (RAA) selected by the Phase III evaluation included:

1. Installing Exposure Pathway Mitigation Measures (EPMs) to the extent feasible (e.g. vapor barriers and venting systems, or sub-slab depressurization systems [SSDs]), and recording Activity and Use Limitations (AULs) as appropriate, for residences where the soil vapor migration pathway to indoor air has been confirmed, and installing EPMs in occupied commercial buildings to reduce chlorinated VOC concentrations in indoor air to that which constitutes a condition of No Significant Risk (NSR).

2. Continuing to operate the soil vapor extraction (SVE) system at the Property to remove COPCs from the vadose zone.
3. Conducting a Site-wide Monitored Natural Attenuation (MNA) program to evaluate overburden and bedrock groundwater plume concentrations over time to assess the rate of natural attenuation processes, and to confirm that groundwater concentrations of chlorinated VOCs are generally stable or decreasing.

The Phase IV FIR/Phase V ROS documented that construction and implementation of the Comprehensive Response Action (CRA) has been completed; and additional activities, such as operation and monitoring of active remedial systems, will be conducted under Phase V.

In accordance with the MCP, particularly 310 CMR 40.0892, this Phase V Status Report No. 28 and RMR No. 43 includes the following information regarding the remedial actions being conducted at the Site:

- A description of the type and frequency of operation, maintenance, and/or monitoring (OMM) activities.
- A description of any significant modifications made to the OMM activities since the last reporting period.
- An evaluation of the performance of the remedial action during the reporting period, including whether the remedial action is achieving remedial goals specified in the Phase IV RIP as described in 310 CMR 40.0874(3), and a description of any conditions or problems identified through OMM activities during the reporting period that are, or may be, affecting the performance of the remedial action.
- A description of the measures taken to address any conditions or problems identified through OMM activities during the reporting period.
- The name, license number, signature, and seal of the LSP.

Following is a summary of OMM activities conducted at the Site to date:

E.S.2. Capuano Center

An SSDS is installed in the east wing of the Capuano Center. In addition, GEI sealed certain slab/wall joints at the Capuano Center to mitigate a potential preferred migration pathway. GEI conducted 24 rounds of indoor air sampling after the SSDS was installed in February 2007. The Critical Exposure Pathway (CEP) to indoor air has been eliminated and a condition of NSR has been achieved for occupants of the Capuano Center. Accordingly, it is GEI's opinion that the system was constructed and operates in accordance with the design standards provided in the Phase IV RIP and has achieved the remedial objectives.

The system currently includes three radon fans on dedicated discharge pipes for each collection header extending above the roofline. Remote telemetry sensors are installed on the system. GEI performed post-modification indoor air sampling on May 23 and 24, 2015. VOCs were not detected above laboratory reporting limits during the indoor air sampling, indicating that the system as modified continues to meet the remedial objectives.

GEI will continue to inspect and maintain the system and continue operation and monitoring.

E.S.3. Residential and Commercial Properties

As part of the IRA, while Site conditions were still under investigation, GEI took timely action to evaluate and implement measures to eliminate or mitigate CEPs to the extent feasible. The feasibility of such measures was determined by physical conditions, including the suitability of each property to install active or passive vapor controls, and by amenability of property owners to provide access. Mitigative measures were initially implemented as IRA activities. The Phase II/Phase III assessment and evaluation of RAAs included response actions to address CEPs as part of the recommended CRA. With the submittal of the Phase IV RIP, the IRA addressing CEPs was closed with an IRAC Report and an IRAC Report Amendment. In accordance with the MCP (310 CMR 40.0427), “mitigation of Critical Exposure Pathway(s) is continuing by incorporation of ongoing response actions to address the Critical Exposure Pathway(s) into the Phase IV Remedy Implementation Plan for the disposal site.” Following the submittal of the IRAC Report and IRAC Report Amendment, all further response actions have been conducted in accordance with the Phase IV RIP. Construction and implementation of the CRA has been completed. OMM activities, including operation of active remedial systems and active EPMMs (AEPMMs), continue to be conducted under Phase V or are being implemented as Partial Permanent Solutions Statements (PSSs) with Conditions. As construction and redevelopment occurs within the Disposal Site, GEI continues to evaluate the need for new or modified EPMMs, consistent with the CRA and Phase IV RIP, and implement those measures pursuant to Phase V.

The following is a summary of activities conducted and results obtained with respect to EPMMs through June 15, 2025:

- EPMMs have been installed or are being installed in 24 residential and commercial properties, not including the EPMMs installed at 50 Tufts Street, 60 Tufts Street, and the Capuano Center. Currently EPMMs are relied upon to meet the remedial objectives at 20 properties and are not being relied on at the following:
 - One EPMM (at 103 Washington Street) was abandoned when the building was vacated and then demolished as part of redevelopment. The redevelopment of the mixed-use building at 103 Washington Street did not include an EPMM (see below for additional information).
 - An EPMM was installed at 163 Glen Street when the former American Legion Post building was redeveloped as multi-family housing. It was demonstrated that the EPMM was not required based on sub-slab soil gas sampling results that were below residential sub-slab soil gas Screening Values (SSGSV).
 - The EPMM at 10 Morton Street was temporarily removed during building renovation activities. The construction of a new EPMM was completed during this reporting period.
 - An EPMM is in the process of being installed at 121 Washington Street, a mixed-use building with retail space on the ground floor and residences above, but it is not yet complete.

- The property at 103 Washington Street has been redeveloped as a mixed-use building with commercial space and open-air parking on the first floor and residential units above without an EPMM. As of February 2024, construction is complete, and the building is occupied. GEI has conducted indoor air and sub-slab soil vapor sampling in May 2023, July 2023, March 2024, December 2024, and February 2025. Based on the results of the sampling and a Method 3 Risk Characterization, GEI prepared a Partial Permanent Solution with No Conditions Statement that was submitted to MassDEP in June 2025.
- The property at 105 Washington Street has been redeveloped as a mixed-use building with commercial space and open-air parking on the first floor and residential units above. Construction activities were completed in June 2022, and the building is occupied. An EPMM was not installed. GEI has conducted indoor air and sub-slab soil vapor sampling in August 2021, March 2022, February 2023, May 2023, December 2024, and February 2025. Based on the results of the sampling, GEI will prepare a Partial Permanent Solution Statement for the Property.
- The property at 10 Morton Street is being renovated, which includes lowering the elevation of the basement floor and installing a replacement EPMM. The replacement EPMM provides for a sub-slab venting system and 20 mil vapor barrier. Post installation sub-slab soil vapor and indoor air testing will be conducted to evaluate whether the EPMM and an AUL are required to maintain a condition of NSR. The EPMM installation was completed when the riser pipe to the roof was reconnected in September 2024. Confirmatory sub-slab soil vapor samples were collected in October 2024 and March 2025.
- The property at 31 Tufts Street, formerly a paved parking lot, has been redeveloped with multi-family housing. The development is a three-story residential apartment building with surface parking and public open space. An EPMM was incorporated into the new construction pursuant to a RAM Plan submitted for this property in July 2022. GEI conducted indoor air and sub-slab soil vapor sampling at 31 Tufts Street in October 2023, January 2024, September 2024, and February 2025. GEI will continue coordinating with the owner of the property to continue performing the vapor intrusion evaluation at the property. Additional soil gas and indoor air sampling is planned for fall 2025.
- The property at 121 Washington Street is being redeveloped into a mixed-use building with commercial space on the ground floor and apartment units above, there is no parking associated with the development. A small commercial building formerly occupied the property and was demolished in 2020. As of June 2025, the building envelope is complete. An EPMM has been incorporated into the new construction, consistent with a RAM Plan submitted in February 2024. The EPMM was completed by December 2024 when the system riser piping had extended through the roof of the building.
- GEI conducted one EPMM inspection during this reporting period in February 2025. GEI will conduct annual EPMM inspections again in the fall of 2025. GEI was unable to access two of the residential properties (4 Morton Street and 95R Franklin Street) but will continue its attempts to obtain access for EPMM inspections at these properties during the next reporting period.
- ARCADIS U.S., Inc. (ARCADIS) prepared an Updated 2015 Method 3 Risk Characterization, which incorporated updated soil, groundwater, and indoor air data sets, and included updated MassDEP

toxicity information, particularly for PCE and TCE. Based on the Updated 2015 Method 3 Risk Characterization, the performance of individual EPMMs, and a review of indoor air sampling results for samples collected since the Updated 2015 Method 3 Risk Characterization, a condition of NSR exists for current and future building occupants at each property within the Site.

- A Permanent Solution with Conditions Statement will be submitted for each property with an active or passive EPMM, where the EPMM has achieved the remedial objectives, an AUL has been recorded for the property, and sufficient post-EPMM indoor air sampling has been conducted. The filing of a Partial PSS with Conditions for an individual property documents the achievement of regulatory closure under the MCP for that property. Therefore, the Phase V provisions will not apply to properties for which a Partial PSS with Conditions has been submitted.

E.S.4. 60 Tufts Street

An SSDS has been installed in the 17-unit condominium building at 60 Tufts Street. The SSDS monitoring data show that the sub-slab vacuum field generated by the SSDS provides sufficient coverage to be protective. Indoor air testing results indicate that a condition of NSR has been achieved for building occupants at 60 Tufts Street. Accordingly, it is GEI's opinion that the system was constructed and is operating in accordance with the design standards provided in the Phase IV RIP and has achieved the remedial objectives.

Remote telemetry was installed on the system on July 24, 2015. GEI will continue to inspect and maintain the system. GEI monitors parameters and sub-slab conditions for the system (e.g., flow rate, vacuum) at the headers on a quarterly basis. GEI will continue operation and monitoring of the SSDS at 60 Tufts Street.

Based on pre-EPMM indoor air testing at 60 Tufts Street, and changes to the toxicological characteristics for PCE, the AEPMM may not be required to maintain a condition of NSR. GEI has communicated with the owners and occupants of 60 Tufts Street, who are amenable to EPMM closure indoor air testing. In accordance with MassDEP's 2016 VI Guidance, GEI initiated a closure indoor air testing program at 60 Tufts Street. However, this testing was suspended during the COVID-19 pandemic. The unit GEI had been testing was sold and the condominium property management company changed, GEI has been in communication with the new property management company.

E.S.5. 50 Tufts Street Property

An SSDS and an SVE system have been installed at the Property. The SSDS monitoring data continue to show that the sub-slab vacuum field generated by the SSDS provides sufficient coverage to be protective. The building is currently occupied by several commercial tenants. Based on indoor air testing results collected since the combined system has been in operation, a condition of NSR has been achieved for the building at the Property for full-time commercial workers. Accordingly, it is GEI's opinion that the system was constructed and operates in accordance with the design standards provided in the Phase IV RIP and has achieved the remedial objectives. GEI will continue the operation and monitoring of the combined SSDS/SVE system at 50 Tufts Street.

Remote telemetry was installed on the 50 Tufts Street system on April 14, 2015. The telemetry system at 50 Tufts Street consists of a wireless remote monitoring hub that receives telemetry notification from the other AEPMMs throughout the Site. GEI monitors parameters and sub-slab conditions for the system (e.g., flow rate, vacuum, off-gas treatment efficiency) quarterly, and monitors for off-gas treatment efficiency monthly.

The combined SSDS/SVE system installed at the Property serves to protect indoor air quality and to remove source material from the vadose zone below and around the building. Monitoring data from both the SSDS and SVE components through June 15, 2025, show that approximately 9,507 lbs of VOCs have been removed from the vadose zone at the Property. GEI will continue operation and monitoring of the combined SSDS/SVE system at 50 Tufts Street.

E.S.6. Telemetry

The MCP requires that remote telemetry provide the owner and operator of the building and MassDEP notification upon failure of the system. Remote telemetry has been installed at each property with an AEPMM including the Capuano Center, except for 9 Knowlton Street. The owner of 9 Knowlton Street has been unresponsive to telemetry access request letters, telephone calls, and property visits. Therefore, it is currently infeasible to install telemetry at this property.

GEI evaluated the current telemetry system in consideration of the 2024 MCP amendments, effective March 1, 2024. The MCP amendments include a requirement for continual monitoring of system vacuum. However, GEI understands that properties where telemetry systems are already registered with MassDEP will be grandfathered in (310 CMR 40.1026[3][d][6]) and are not required to continually report system vacuum.

E.S.7. Tufts Street Reconstruction Project

The City of Somerville is reconstructing the Tufts Street sidewalks and roadway in the area of the Site, including planting trees and greenery. In March 2024, eight soil borings were conducted by the City's LSP to assess contamination in the project area. The findings, along with additional data, were submitted to MassDEP as part of a Utility-Related Abatement Measure (URAM) and a Contained-In Determination (CID) in May 2025. The CID identified low levels of PCE detected in one soil sample and requested soil in that area be reclassified for in-state landfill disposal. The URAM described the integration of soil and groundwater management into project design, soil management procedures and health and safety requirements for contractors.

E.S.8. GLX Project

The MBTA, through its contractor GLX Constructors (GLXC), has completed work to extend MBTA Green Line service to Union Square in Somerville and beyond to College Avenue in Medford. This Green Line Extension (GLX) Project included significant infrastructure improvements near the Site, including a new pump station, reconstruction of the bridge passing over Washington Street, new train tracks within the MBTA right-of-way (ROW), a new train station, and utility improvements.

Between 2019 and 2024, approximately 25,400 cubic yards of soil were excavated, managed, and disposed of off-site during construction. Construction dewatering and on-site groundwater treatment, which included the use of granular activated carbon, were conducted primarily along Washington Street between April 2019 and September 2020. Over the course of these operations, more than 8 million gallons of groundwater were pumped for treatment, with PCE concentrations in the influent ranging between 410 and 1,660 micrograms per liter. The dewatering effluent water was treated then discharged to the Millers River through a storm drain.

Though the GLX Project is now complete, GEI has determined that certain aspects of the project may have had a permanent effect on altering groundwater conditions at the Site, as further discussed in this report.

E.S.9. Monitored Natural Attenuation

MNA was selected as a part of the remedial strategy to reach a Permanent Solution for the Site, as documented in the Phase III Report submitted to MassDEP in 2008. GEI has implemented an MNA program to confirm on-going natural attenuation is occurring at the Site. GEI is currently conducting a significant update of the MNA evaluation which will be provided under separate cover and in future Status Reports.

E.S.10. Notice of Audit Finding/Notice of Non-Compliance

On December 12, 2024, MassDEP issued to UniFirst a Notice of Audit Finding, Notice of Noncompliance (NOAF/NON) and Termination of ROS. The Site had been in ROS since August 2014; however, MassDEP stated in the NOAF/NON that the requirements of 310 CMR 40.0893(2) were not being met and thus terminated ROS through the NOAF/NON. After clarification of the current regulatory status of the Site through subsequent meetings and discussions with MassDEP, UniFirst is continuing Phase V activities during the pendency of the NOAF/NON.

During a meeting among MassDEP, UniFirst, GEI, and their respective counsel on April 25, 2025, MassDEP clarified that the submissions called for in the section of the NOAF/NON titled “Actions to be Taken and Deadline for Taking Such Actions,” including the “revised” Phase II, Phase III, and Phase IV reports should take the form of supplements or addendums to the existing reports, rather than comprehensive revisions. Also at the April 25, 2025, meeting, MassDEP extended the time for submission of the Tier Classification Extension form to May 9, 2025. UniFirst submitted the Tier Extension form within the extended time period provided by MassDEP.

To support the Phase II CSA Addendum and the Conceptual Site Model update, as required by the NOAF/NON, GEI will install up to ten new groundwater monitoring wells across the site, targeting three main areas: the 50 Tufts Street source area, the neighborhood downgradient and north of Washington Street, and the area south of Washington Street. The installation is expected to take place in September 2025. Among the proposed wells, three deep bedrock wells at 50 Tufts Street and a combination of new and replacement wells in the downgradient neighborhood will be installed. One shallow bedrock well is planned for installation near Morton and Knowlton Streets, and another, along with an adjacent overburden well, is planned for installation on Franklin Street. Additionally, three wells will be installed along the southern side of Washington Street.

Following well installation, GEI will conduct comprehensive groundwater sampling in the fall of 2025 and into the winter of 2025/2026. Samples from 44 monitoring wells will be collected and analyzed for VOCs, with select samples further tested for MNA parameters.

As required by the NOAF/NON, GEI will seek access to conduct two rounds of indoor air testing at the following residences where passive EPMMs have been installed: 91 and 93 Franklin Street; 166-168 Glen Street, 17, 32 and 34 Knowlton Street; 4, 11, and 19-19A Morton Street. 91 and 93 Franklin is a single building. Indoor air testing was conducted in 7 of the 8 properties between February and April 2025; however, access was not granted by the owner of 4 Morton Street. A second round of indoor air testing will be conducted at the cooperating properties in the fall of 2025. GEI will continue to attempt to access the 4 Morton Street property.

As further directed in the NOAF/NON, GEI will attempt to obtain access at the seven properties identified in the NOAF/NON where the owners historically refused UniFirst's offer to install vapor mitigation systems. These seven properties include: 99 Franklin Street, 162-164 Glen Street, and 9, 11-13, 17, 19, and 25 Tufts Street. If access is granted, UniFirst intends to collect indoor air samples from these properties for further evaluation of present conditions.

E.S.11. Remedial Monitoring Report No. 43

Remedial Monitoring Report No. 43, documenting OMM activities of active remedial systems at the Site, is presented in the BWSC-108A and 108B Transmittal Forms in Appendix A.

1. Introduction

On behalf of UniFirst Corporation (UniFirst) of Wilmington, Massachusetts, GEI Consultants, Inc. (GEI) prepared this Phase V Status Report No. 28 and Remedial Monitoring Report (RMR) No. 43 for the site located at 50 Tufts Street in Somerville, Massachusetts (the Site; Fig. 1-1). The Site is identified by Massachusetts Department of Environmental Protection (MassDEP) Release Tracking Number (RTN) 3-23246. The Site includes the 50 Tufts Street property (the Property), other properties in the neighborhoods east and immediately north, south, and west of the Property, and the Michael E. Capuano Early Childhood Center (Capuano Center) located at 150 Glen Street in Somerville, Massachusetts (Fig. 1-2). The Site has been in Phase V since 2011. This Phase V Status Report No. 28 covers the period from December 16, 2024, to June 15, 2025.

On December 12, 2024, MassDEP issued a Notice of Audit Finding, Notice of Noncompliance (NOAF/NON) and Termination of Remedy Operation Status (ROS). The Site had been in ROS since August 2014; however, MassDEP stated in the NOAF/NON that the requirements of 310 CMR 40.0893(2) were not being met and thus terminated ROS. UniFirst is continuing Phase V activities, consistent with discussions with MassDEP following its issuance of the NOAF/NON.

The NOAF/NON also required revisions to the Massachusetts Contingency Plan (MCP; 310 CMR 40.0000) milestone reports in accordance with the following schedule:

- By February 12, 2025, submit a Tier Classification Extension in accordance with 310 CMR 40.0560(7).
- By April 14, 2026, submit an addendum to the Phase II Comprehensive Site Assessment Report in accordance with the requirements 310 CMR 40.0835 including an updated Conceptual Site Model, site boundary based on the nature and extent of contamination.
- By June 12, 2026, submit an addendum to the Phase III Remedial Action Plan in accordance with the 310 CMR 40.0850 considering technological advances made in the treatment of chlorinated volatile organic compounds (CVOs).
- By August 12, 2026, submit an addendum to the Phase IV Remedy Implementation Plan in accordance 310 CMR 40.0874.
- By December 14, 2026, in accordance with the provisions of 310 CMR 40.40.0893(6)(e), achieve a Permanent or Temporary Solution for the Site.

During a meeting among MassDEP, UniFirst, GEI, and their respective counsel on April 25, 2025, MassDEP clarified that the submissions called for in the section of the NOAF/NON titled “Actions to be Taken and Deadline for Taking Such Actions,” including the “revised” Phase II, Phase III, and Phase IV reports should take the form of supplements or addendums to the existing reports, rather than comprehensive revisions. Also at the April 25, 2025, meeting, MassDEP extended the time for submission of the Tier Classification Extension form to May 9, 2025. UniFirst submitted the Tier Extension form within the extended time period provided by MassDEP.

1.1. Contact Information

Entity Undertaking

Response Actions

UniFirst Corporation
68 Jonspin Road
Wilmington, MA 01887

Licensed Site Professional (LSP):

Ileen S. Gladstone, P.E., LSP, LEED AP
Senior Vice President
GEI Consultants, Inc.
400 Unicorn Park Drive
Woburn, MA 01801
781.721.4012
LSP License No. 9719

Entity who will own, operate, and/or maintain the selected Remedial Action Alternative (RAA):

UniFirst Corporation
68 Jonspin Road
Wilmington, MA 01887
978-658-8888

Contact Person

Catherine Malagrida, P.G.
Environmental Compliance Manager
UniFirst Corporation
68 Jonspin Road
Wilmington, MA 01887
978.658.8888 ext. 0587

1.2. Background

In 2002, a release of chlorinated volatile organic compounds (VOCs) (particularly tetrachloroethylene [also known as perchloroethylene (PCE)], trichloroethylene [TCE], and 1,1,1-trichloroethane [TCA]) to soil and groundwater at the Property was reported to the MassDEP and assigned RTN 3-23246. Three other RTNs were subsequently issued for the Site: 3-24358, 3-24376, and 3-26114. For tracking and reporting purposes, these RTNs have been consolidated under RTN 3-23246.

The detection of chlorinated VOCs in indoor air at some buildings within the Site required the implementation of an Immediate Response Action (IRA). The “Immediate Response Action Plan” associated with RTN 3-23246 was submitted to MassDEP on January 9, 2006. The Site was classified as Tier IC (Permit No. W085813). The “Phase II Comprehensive Site Assessment (CSA), Method 3 Risk Characterization, and Phase III Remedial Action Plan (RAP)” (Phase II/III) for the Site was submitted to MassDEP on July 14, 2008. The “Phase IV Remedy Implementation Plan” (Phase IV RIP) was submitted to MassDEP on August 10, 2009. The “Immediate Response Action Completion Report and Remedial Monitoring Report No. 11” (IRAC Report) was submitted to MassDEP on November 13, 2009, and the “Immediate Response Action Completion Report Amendment” (IRAC Report Amendment) was submitted to MassDEP on April 1, 2011. The “Phase IV Final Inspection Report, Remedial Monitoring Report No. 15, and Phase V Remedy Operation Status Report,” (Phase IV FIR/Phase V ROS) was submitted to MassDEP on August 4, 2011. The Site was reclassified as Tier II on August 1, 2014, and a Tier Classification Extension was submitted on May 9, 2025, as required by the December 2024 NOAF/NON and a subsequent extension of the required submission date provided by MassDEP.

The Phase II/Phase III identified the following areas of the Site requiring investigation and mitigation:

- The Property.
- The Capuano Center.

- 60 Tufts Street, a 17-unit condominium building north of the Property.
- Certain residences and commercial buildings located near the Property.

The RAA selected in the Phase III was:

1. Installing Exposure Pathway Mitigation Measures (EPMs) to the extent feasible (e.g. vapor barrier and venting system, or sub-slab depressurization systems [SSDs]), and recording Activity and Use Limitations (AULs) as appropriate, for residences where the soil vapor migration pathway to indoor air has been confirmed, and installing EPMs in occupied commercial buildings to reduce chlorinated VOC concentrations in indoor air to that which constitutes a condition of No Significant Risk (NSR).
2. Continuing to operate the soil vapor extraction (SVE) system at the Property to remove compounds of potential concern (COPCs) from the vadose zone.
3. Conducting a Site-wide Monitored Natural Attenuation (MNA) program to evaluate overburden and bedrock groundwater plume concentrations over time to assess the rate of natural attenuation processes, and to confirm that groundwater concentrations of chlorinated VOCs are generally stable or decreasing.

As part of the IRA, while Site conditions were still under investigation, GEI took timely action to evaluate and implement measures to eliminate or mitigate Critical Exposure Pathways (CEPs) to the extent feasible. The feasibility of such measures was determined by physical conditions, including the suitability of each property to install an active or passive vapor controls, and by amenability of property owners to provide legal access. Mitigative measures were initially implemented as IRA activities. The Phase II/Phase III assessment and evaluation of RAAs included response actions to address CEPs as part of the recommended Comprehensive Response Action (CRA). With the submittal of the Phase IV RIP, the IRA addressing CEPs was closed with an IRAC Report and IRAC Report Amendment, in accordance with the MCP, particularly 310 CMR 40.0427 ("mitigation of Critical Exposure Pathway(s) is continuing by incorporation of ongoing response actions to address the Critical Exposure Pathway(s) into the Phase IV Remedy Implementation Plan for the disposal site"). Following submittal of the IRAC Report and IRAC Report Amendment, all further response actions were continued under Phase IV and Phase V.

The CRA for the Site includes continued active operation and maintenance of the existing commercial and residential EPMs, the SSDs at the Capuano Center, and the SSDs and SVE system at the Property, to achieve a Permanent Solution pursuant to 310 CMR 40.0890. As required by the NOAF/NON, GEI will provide supplements or addendums to the Phase III RAP and Phase IV RIP, which may augment the current CRA. Despite MassDEP's formal revocation of ROS through the NOAF/NON, it is GEI's opinion that the conditions at the Site continue to meet the requirements for ROS in accordance with the MCP (310 CMR 40.0893[2]) because:

- The Phase III RAP was completed on July 14, 2008. The Phase IV RIP was completed on August 10, 2009.
- A final inspection has been performed and confirmed that the CRA has been constructed and implemented in accordance with the Phase IV RIP and is meeting projected design standards to achieve a Permanent Solution.

- Each source of oil and/or hazardous material (OHM) is controlled at the Site. Non-aqueous phase liquid (NAPL) is not visibly present at the Site. Any dense non-aqueous phase liquid (DNAPL) that may be present is not migrating and exists in a stable configuration. The Phase III RAP demonstrated that it is not feasible to eliminate DNAPL at the Site. Although there has been an increase in groundwater concentrations in two wells in recent sampling events, which may be due to construction dewatering conducted by the Massachusetts Bay Transit Authority (MBTA) that shifted the geographic location of the plume within the Site, in general the dissolved-phase groundwater plumes and vapor plumes are stable and are not causing an increase in concentrations of VOCs in groundwater, soil, soil vapor, or indoor air across the Site. Natural attenuation processes are occurring and are continuing to balance contaminant levels. There are no unpermitted or uncontrolled releases of OHM at the Site.
- Any substantial hazards have been eliminated as documented in the Substantial Hazard Evaluation (SHE) completed by ARCADIS U.S., Inc. (ARCADIS) of Chelmsford, Massachusetts in August 2011. ARCADIS also completed a Site-wide Method 3 Risk Characterization in August 2015, and GEI routinely performs Method 3 risk screening for additional indoor air data collected since 2015. Based on these risk evaluations, and based on the performance of individual EPMMs, a condition of NSR exists for current and future building occupants at each property within the Site.
- GEI has identified the longest duration of a shutdown of each active EPMM (AEPMM) that would be consistent with levels of exposure that do not pose an Imminent Hazard (IH) and poses a condition of NSR.

Construction and implementation of the CRA identified in the Phase IV RIP have been completed; additional activities, such as operation and monitoring of active remedial systems, or installation of new EPMMs, are being conducted under Phase V. When appropriate, portions of the Site may be closed under Partial Permanent Solution Statements (PSSs), with or without Conditions. Operating the SSDS and SVE systems, together with MNA, will ultimately achieve a Permanent Solution for the Site.

GEI will continue to conduct annual operation, maintenance, and/or monitoring (OMM) activities for installed EPMMs where sufficient indoor air sampling has been conducted, and not repeat indoor air testing, to confirm continued system effectiveness. GEI also conducts groundwater sampling and analysis as part of the MNA program.

1.3. Purpose and Scope

The Site entered Phase V on August 4, 2011. In accordance with the MCP (310 CMR 40.0892), this Phase V Status Report No. 28 and RMR No. 43 includes the following information regarding the remedial actions being conducted at the Site:

- A description of the type and frequency of OMM activities.
- A description of any significant modifications made to the OMM activities since the last reporting period.
- An evaluation of the performance of the remedial action during the reporting period, including whether the remedial action is achieving remedial goals specified in the Phase IV RIP as

described in 310 CMR 40.0874(3), and a description of any conditions or problems noted during the reporting period that are or may be affecting the performance of the remedial action.

- A description of the measures taken to correct any conditions or problems that may have been encountered during the reporting period.
- The name, license number, signature, and seal of the LSP.

This report covers the period from December 15, 2024, through June 15, 2025. Details of the engineering concepts, design criteria, construction plans, and specifications were previously provided to MassDEP as part of the Phase IV RIP, IRA Status Reports, RMRs, and IRA Plan Modifications and are not revisited in this report.

1.4. Public Involvement (310 CMR 40.1400)

UniFirst and GEI conducted a series of community meetings to inform property owners, residents, and City of Somerville (the City) officials about the Site. GEI will provide copies of this Phase V Status Report No. 26 and RMR No. 41 to the local public document repository that was established for the Site at the Somerville Central Public Library. The Somerville Public Library has made documents available on the Internet Archive: (<https://archive.org/details/somervillepubliclibrary?tab=collection&query=GEI+Consultants&sort=-date>) .

This report was submitted through eDEP (Transaction No. 1910828) on August X, 2025. A draft copy of the eDEP Transmittal Form (BWSC-108) is provided in Appendix A.

Copies of property owner notification letters, including notice of sampling letters, chemical testing results letters, and other miscellaneous correspondence sent during the reporting period, are in Appendix B. A table summarizing in-person communication with residences is also in Appendix B.

2. GLX Project

2.1. Background

The Massachusetts Bay Transit Authority (MBTA), through its contractor GLX Constructors (GLXC), has completed the extension of MBTA Green Line service to Union Square in Somerville and beyond to College Avenue in Medford. The GLX Project included significant infrastructure improvements near and through the Site, including a new pump station, reconstruction of the bridge passing over Washington Street, new train tracks within the MBTA right-of-way (ROW), a new train station, and utility improvements. The MBTA, GLXC, and their contractors initiated three RTNs (3-35528, 3-34742, and 3-30620) related to construction activities undertaken at the Site. Chris McDermott of TRC Environmental of Lowell, Massachusetts, a subcontractor to GLXC, is the LSP of Record for GLXC.

2.2. Soil Management

The MBTA and GLXC constructed the GLX Project with a combination of a Utility-related Abatement Measure (URAM) and Release Abatement Measures (RAMs) between 2019 and 2024. Approximately 1,950 cubic yards were initially excavated and managed under a URAM for RTN 3-35528. Additional soil excavation and management was conducted under a RAM Plan for RTN 3-34742 submitted in July 2019.

TRC, on behalf of GLXC, filed nine RAM Status Reports between November 2019 and November 2023 and a RAM Completion Report in May 2024. Approximately 18,000 cubic yards of soil was disposed off-site. A summary of the volume of remediation waste disposed off-site during each Status Report reporting period is summarized in Table 2-1 along with the totals reported in the RAM Completion Report. The total cubic yard for each facility based on the summation from the Status Reports and reported in the RAM Completion likely do not agree based on the estimating the number of cubic yards per ton. This estimate is based on a uniform conversion of 1.7 tons per cubic yards which is likely variable.

In addition to the soil managed under RTNs 3-35528 and 3-34742, approximately 5,440 cubic yards of soil were excavated from within the Site boundary as part of GLX Project activities conducted under the Special Projects Designation (SPD) for RTN 3-30620.

2.3. Construction Dewatering

Construction dewatering, groundwater treatment and discharge activities were conducted as part of the RAM. Construction dewatering, generally in Washington Street, and groundwater treatment including with granular activated carbon management was conducted between April 2019 and September 2020. More than 8 million gallons of groundwater was pumped and the PCE concentration in the dewatering influent ranged 410 to 1,660 ug/L. The dewatering effluent was treated then discharged to the Millers River through a storm drain.

2.4. Right-of-Way Contained-in Determinations

TRC prepared sixteen Contained-In Determinations for soil generated near the Washington Street Pump Station and on the MBTA ROW. Soil included in the Contained-In Determination exhibited concentrations of PCE above the laboratory reporting limits but below the applicable MCP Method 1 S-1/GW-1 standard. A summary of the Contained-In Determinations is in Table 2-2.

2.5. Soil Characterization Data from MBTA ROW and Washington Street

Between May 2010 and September 2023, soil samples were collected by Kleinfelder of Cambridge, Massachusetts, on behalf of the MBTA, or TRC, on behalf of GLXC to characterize soil for off-site disposal within the MBTA right of way (ROW), including Washington Street. The date of sampling and the reference location where the sampling is documented is in Table 2-3. The ROW sample locations are on Fig. 2-2, and a summary of the soil analytical results are in Appendix C.

3. Current Conceptual Site Model and Disposal Site Boundary

As defined in the MCP, the Conceptual Site Model (CSM) is a “dynamic framework for assessing site characteristics and risk, identifying and addressing data gaps and managing uncertainty, eliminating or controlling contaminant sources, developing and conducting response action strategies, and evaluating whether those strategies have been effective in achieving desired endpoints.” (310 CMR 40.0006). GEI has developed and continued to update the CSM for the Site as appropriate based upon the investigation data documented in previous reports, including the Phase II Comprehensive Site Assessment, Immediate Response Action (IRA) Plan and Status Reports, the Phase IV Remedy Implementation Plan (RIP), and prior Phase V Remedy Operations (ROS) Status Reports. In 2014, in Phase V Status Report No. 6, GEI updated the CSM and Disposal Site Boundary to include groundwater data collected by the MBTA. In Phase V Status Report No. 17, GEI updated the CSM and Disposal Site Boundary to include a portion of the MBTA ROW near Cross Street where de minimis PCE concentrations were detected in soil samples collected for construction purposes.

The CSM will likely be updated following additional subsurface investigations including groundwater sampling as described in Section 4.4.

4. Subsurface Investigation

4.1. Groundwater Sampling

GEI conducted groundwater sampling at three monitoring wells (MW104R, MW301, and MW115R) in January 2025 to support additional site investigation. GEI installed MW301 in January 2025, as described in section 4.2.

GEI also conducted semi-annual groundwater sampling at 34 monitoring wells in March and April 2025. This included the 18 monitoring wells historically sampled annually in the spring, the 13 additional monitoring wells included in the April 2024 sampling event (described in Phase V Status Report No. 26), and 3 additional wells added for this year's sampling event (MW111R, MW115R, and MW301). Five monitoring wells were sampled earlier in March 2025 (MW106, MW109, GEO-4, GEO-5, and GEO-6) due to the City of Somerville's schedule for the planned reconstruction of Tufts Street. Monitoring well MW111R was sampled twice, once in March 2025 and again in April 2025.

The groundwater samples collected during this period were analyzed by Alpha Analytical, Inc. a Pace Laboratory (Alpha-Pace) of Westborough, Massachusetts for VOCs. A summary of all GEI groundwater sampling activities at the Site, including dates of sampling during this reporting period, is in Table 4-1. The groundwater testing results are summarized in Table 4-2, along with groundwater data from previous investigations. GEI measured groundwater levels at monitoring wells shown in Table 4-3. Groundwater sampling conducted on behalf of the MBTA between 2012 and 2014 by Kleinfelder, and in 2020 by TRC, as part of the GLX Project is summarized in Table 4-4.

Monitoring well locations and the monitoring wells sampled by GEI during this reporting period are shown in Fig. 4-1. The laboratory data reports associated with the January, March, and April 2025 groundwater testing are in Appendix D.

4.1.1. *MW104R Groundwater Results Interpretation*

GEI installed replacement well MW104R in May 2022. The location of MW104R was adjusted slightly south and is located adjacent to the MBTA underdrain vault. Groundwater monitoring well MW104R was intended to be a replacement well for MW104 which was destroyed by the MBTA during its GLX project. MBTA excavation activities affected installation of the replacement well because the southern portion of the 50 Tufts Street property was heavily re-worked as part of construction. The screen for MW104R is approximately 2 feet deeper than MW104 and is also approximately 25 feet south of MW104.

During the April 2024 groundwater sampling event, concentrations of PCE in MW104R (2,200 µg/L), were substantially greater than observed in the destroyed MW104 (less than 20 µg/L since 2009) which was last sampled in 2018. GEI sampled MW104R twice during the previous reporting period, in September and November 2024, where concentrations of PCE were detected at 510 µg/L and 620 µg/L, respectively. GEI sampled MW104R twice during this reporting period, in January and April 2025, where concentrations of PCE were detected at 690 µg/L and 1,700 µg/L, respectively. The concentrations in MW104R are higher than in MW104 and do not likely represent the same data set because:

- The groundwater samples are collected from a deeper interval.
- The location of MW104R is further south than former MW104.
- MBTA construction activities, including dewatering between 2019 and 2020, have likely permanently relocated the plume center of mass southward.

4.2. Boring and Monitoring Well Installation

On January 3, 2025, GEI observed Northern Drill Service, Inc. of Northborough, Massachusetts (Northern) install one soil boring completed as a monitoring well (MW301). The location was first precleared to 5 feet via air knife. MW301 is located within the fire lane adjacent to (north of) the Capuano Center, just off Franklin Street. The boring was installed as a new monitoring well to support additional site investigation. The boring was installed using direct push drilling techniques.

Soil samples collected from the boring were continuously logged (lithology and physical observations) in accordance with the USCS guidelines. Field screening for VOCs in the jar headspace for soil samples was performed with a PID equipped with a 10.6 eV lamp. PID field screening results are summarized on the boring log in Appendix E. Jar headspace screening results were all 0.0 ppm.

The boring was advanced to a depth of 15 feet. Monitoring well MW301 was installed with a well screen interval from 5 to 15 feet. The monitoring well was constructed of 2-inch diameter PVC. The monitoring well installation log is in Appendix E.

4.3. Hydraulic Flow Data Loggers

GEI installed vented Level TROLL 500 Data Loggers in MW104R on December 27, 2023, and MW203R and SH-MW2R on April 12, 2024. GEI installed well MW104R in May 2022. The data loggers were installed to evaluate long term groundwater flow trends in this portion of the Site, which was heavily influenced by the GLX construction. GEI has downloaded the data approximately every four weeks and will continue to monitor groundwater elevations monthly. Between April 21 and May 7, 2024, the transducer in MW203R was above the height of the groundwater table; when GEI collected data on May 7, the transducer was lowered in the well. Between August 1 and 4, 2024, the transducer in MW203R was above the height of the groundwater table; however, it could not be lowered further into the well. Hydrographs for the three monitoring wells are included in Appendix F.

4.4. Further Phase V Activities

4.4.1. Installation of Groundwater Monitoring Wells

To revise the Phase II CSA and the CSM as required by the NOAF/NON, GEI will install up to 10 groundwater monitoring wells at the Site. The proposed borings are in three areas: the 50 Tufts Street source area, the downgradient neighborhood and north of Washington Street, and south of Washington Street as shown on Fig. 4-2. We expect to install the wells in September 2025.

We are proposing installing three deep bedrock monitoring wells (MW401, MW402, and MW403) at the 50 Tufts Street property.

We are proposing to install three new monitoring wells and one replacement monitoring well within the neighborhood downgradient of the 50 Tufts Street property. Monitoring well GEO-3 was formerly located at the vacant lot, now known as 31 Tufts Street, and was destroyed as part of the redevelopment. The monitoring well GEO-3R will be screened from approximately 5 to 20 feet, similar to the original well. One shallow bedrock monitoring well (MW404) is proposed to be installed near the intersection of Morton Street and Knowlton Street and one shallow bedrock monitoring well (MW405D) is proposed to be installed on Franklin Street. We anticipate that approximately 10 feet of bedrock will be cored for the wells to be screened within the bedrock. An overburden well (MW405S) will be installed next to MW405D without soil sampling.

Three monitoring wells (MW406, MW407, and MW408) are proposed along the southern side of Washington Street.

4.4.2. Groundwater Sampling

Following installation and development of the new monitoring wells, GEI will conduct site wide groundwater sampling in the fall of 2025 and the winter of 2025/2026. We will collect groundwater samples from 44 monitoring wells, and each will be sampled for VOCs. Groundwater and QA/QC samples will be submitted to Alpha-Pace chemical testing of VOCs. Select groundwater samples will also be submitted for chemical testing of monitored natural attenuation (MNA) parameters.

5. Indoor Air and Soil Vapor Sampling

5.1. Soil Vapor Sampling

From January 2006 through June 15, 2025, GEI collected soil vapor samples at 58 residences and commercial buildings. Fig. 5-1 shows buildings where GEI conducted soil vapor sampling. The procedure for collecting soil vapor samples was in IRA Status Report No. 3. Samples typically were collected from below the basement slab.

During this reporting period, GEI collected sub-slab samples from the properties listed in the table below:

Property	Date Sampled	Table	Purpose
97 Franklin Street	February 19, 2025	5-1	Site Investigation
156 Glen Street	February 19, 2025	5-2	Property Owner Request
10 Morton Street	March 18, 2025	5-3	RAM Objective
21 Morton Street	February 19, 2025	5-4	Property Owner Request
31 Tufts Street	February 19, 2025	5-5	Closure
103 Washington Street	February 11, 2025	5-6	Closure
105 Washington Street	February 11, 2025	5-7	Closure

The sub-slab soil vapor samples were submitted to Alpha-Pace for laboratory analysis by EPA Method TO-15 with the following modified list of analytes:

- 1,1-Dichloroethane
- 1,1-Dichloroethylene (1,1-DCE)
- trans-1,2-Dichloroethylene
- cis-1,2-Dichloroethylene
- 1,1,1-Trichloroethane (TCA)
- 1,1,2,2-Tetrachloroethane
- 1,1,2-Trichloroethane
- Tetrachloroethylene (PCE)
- Trichloroethylene (TCE)
- Vinyl Chloride

The soil vapor sampling results are summarized on Table 5-1 through 5-7 and the laboratory data reports are in Appendix D.

5.1.1. Soil Vapor Sampling – Checklists and Methods

Sub-slab soil vapor samples were collected to evaluate the concentrations of chlorinated VOCs in soil vapor beneath the buildings. GEI collected soil vapor samples using SUMMA® canisters and regulators provided by Alpha-Pace. Each canister was certified clean by the laboratory. Copies of the certifications are in Appendix D. The soil vapor samples were collected over a 1-hour period.

Flow regulators were attached to the SUMMA® canisters at the location of the testing. The laboratory-set flow regulator was then turned on, and the starting pressure and time recorded. The regulator was turned off before reaching ambient pressure, and the final pressure and time were recorded. Sub-Slab Monitoring

Point Installation Logs, Pre-Sampling Checklists, and Sub-Slab Sampling Checklists completed for the sub-slab soil vapor samples collected during this reporting period are in Appendix G.

5.1.2. Soil Vapor Sampling – Results

5.1.2.1. 97 Franklin Street

On February 19, 2025, two soil vapor samples from previously installed sub-slab monitoring points were collected from beneath the building slab. Concentrations of PCE and TCE were detected above laboratory reporting limits. Concentrations of chlorinated CVOCs in soil vapor are below the applicable residential sub-slab soil gas Screening Values (SSGSV).

5.1.2.2. 10 Morton Street

On March 18, 2025, two soil vapor samples from previously installed sub-slab monitoring points were collected from beneath the building slab. Concentrations of PCE and trans-1,2-dichloroethylene (trans-1,2-DCE) were detected above laboratory reporting limits but below applicable residential SSGSV.

5.1.2.3. 21 Morton Street and 156 Glen Street

21 Morton Street and 156 Glen Street is a single building. On February 19, 2025, GEI installed two soil vapor sampling points and collected two soil vapor samples from the portion of the basement at 21 Morton Street and installed one soil vapor sampling point and collected one soil vapor sample from the portion of the basement at 156 Glen Street. Concentrations of PCE and TCA were detected above laboratory reporting limits in all the samples but below applicable residential SSGSV.

5.1.2.4. 31 Tufts Street

On February 19, 2025, two soil vapor samples from previously installed sub-slab monitoring points were collected from beneath the building slab. One week prior to collecting the soil vapor samples the venting system was closed to simulate conditions in the absence of passive venting. Concentrations of PCE, TCE, and TCA were detected above laboratory reporting limits but below applicable residential SSGSV.

5.1.2.5. 103 Washington Street

On February 11, 2025, two soil vapor samples from previously installed sub-slab monitoring points were collected from beneath the building slab. Concentrations of PCE, TCE, trans-1,2-DCE, and cis-1,2-dichloroethylene (cis-1,2-DCE) were detected above laboratory reporting limits in at least one sample but below applicable commercial SSGSV and residential SSGSV.

5.1.2.6. 105 Washington Street

On February 11, 2025, one soil vapor sample from the previously installed sub-slab monitoring point was collected from beneath the building slab. Concentrations of PCE, and trans-1,2-DCE were detected above laboratory reporting limits in at least one sample but below applicable commercial SSGSV and residential SSGSV.

5.2. Indoor Air Sampling

From January 2006 through June 15, 2025, GEI collected indoor air samples at 76 residences and commercial buildings. Fig. 5-1 shows buildings where GEI conducted indoor air sampling. The procedure for collecting indoor air samples was included in IRA Status Report No. 3. Samples are typically collected from the basement and first floor of each building.

In the NOAF/NON, MassDEP requested indoor air sampling at 9 properties where EPMMs have been installed (91 and 93 Franklin Street; 166-168 Glen Street, 17, 32 and 34 Knowlton Street; 4, 11, and 19-19A Morton Street). This list actually identifies 8 properties because 91 and 93 Franklin are a single building. During the reporting period we gained access to 7 of the 8 properties, but we could not access 4 Morton Street.

During this reporting period, GEI collected indoor air samples from the properties listed in the table below:

Property	Date Sampled	Table	EPMM	Purpose	Requested by MassDEP
84 Franklin Street	May 7, 2025	5-8	No system	Site Investigation	--
91-93 Franklin Street	February 28, 2025	5-9	Passive	EPMM Effectiveness	yes
97 Franklin Street	February 19, 2025	5-10	No System	Site Investigation	--
156 Glen Street	February 19, 2025	5-11	No system	Property Owner Request	--
166-168 Glen Street	February 21, 2025	5-12	Passive	EPMM Effectiveness	yes
17 Knowlton Street	March 6, 2025	5-13	Passive	EPMM Effectiveness	yes
32 Knowlton Street	February 28, 2025	5-14	Passive	EPMM Effectiveness	yes
34 Knowlton Street	February 25, 2025 and April 9, 2025	5-15	Passive	EPMM Effectiveness	yes
10 Morton Street	March 18, 2025	5-16	Passive	RAM Objective	--
11 Morton Street	April 8, 2025 and May 7, 2025	5-17	Passive	EPMM Effectiveness	yes
19-19A Morton Street	February 27, 2025	5-18	Passive	EPMM Effectiveness	yes
21 Morton Street	February 19, 2025	5-19	No system	Property Owner Request	--
31 Tufts Street	February 19, 2025	5-20	Passive	Closure	--
103 Washington Street	February 11 and 21, 2025	5-21	No system	Closure	--
105 Washington Street	February 11, 2025	5-22	No system	Closure	--

The indoor air samples were submitted to Alpha-Pace for laboratory analysis by EPA Method TO-15 with the following modified list of analytes:

- 1,1-Dichloroethane
- 1,1-Dichloroethylene (1,1-DCE)
- trans-1,2-Dichloroethylene
- cis-1,2-Dichloroethylene
- 1,1,1-Trichloroethane (TCA)
- 1,1,2,2-Tetrachloroethane
- 1,1,2-Trichloroethane
- Tetrachloroethylene (PCE)
- Trichloroethylene (TCE)
- Vinyl Chloride

The indoor air sampling results are summarized on Table 5-8 through 5-22 and the laboratory data reports are in Appendix D.

5.2.1. Indoor Air Sampling – Checklists and Methods

The indoor air samples were collected to evaluate if there was likely a complete vapor intrusion pathway in the buildings' occupied space. The samples were collected using SUMMA® canisters and regulators provided by Alpha-Pace. Each canister was certified clean by the laboratory. Copies of the certifications are in Appendix D. The indoor air samples were collected over an approximately 24-hour period.

Flow regulators were attached to the SUMMA® canisters at the location of the testing. The SUMMA® canisters were placed so that the air inlet was approximately 3 to 5 feet above the floor. The laboratory-set flow regulator was then turned on, and the starting pressure and time were recorded. The regulator was turned off before reaching ambient pressure, and the final pressure and time were recorded. Pre-Sampling Checklists and Indoor Air Sampling Checklists completed for each indoor air sample collected during this reporting period are in Appendix G.

5.2.2. Indoor Air Sampling – Results

5.2.2.1. 84 Franklin Street

On May 7, 2025, one indoor air sample was collected from each of the basement, the first floor, and the second floor. PCE was detected above laboratory reporting limits in all three samples. Additionally, trans-1,2-DCE was detected above laboratory reporting limits in the samples collected in the basement and on the first floor. Concentrations of chlorinated VOCs are below the residential Threshold Values (TVr).

5.2.2.2. 91-93 Franklin Street

On February 28, 2025, one indoor air sample was collected in the basement and two samples were collected on the first floor, one in each of the units (91 Franklin Street and 93 Franklin Street). PCE was detected above laboratory reporting limits in all three samples but below TVr.

5.2.2.3. 97 Franklin Street

On February 19, 2025, one indoor air sample was collected from each of the basement, the first floor, and the second floor. PCE and TCE were detected above laboratory reporting limits in all three samples. Additionally, TCA and 1,1-dichloroethane were detected above laboratory reporting limits in the

basement sample. In the basement sample, the concentration of TCE was $1.10 \mu\text{g}/\text{m}^3$, which is greater than the TVr. However, the basement is not living or working space. Concentrations of TCE on the first and second floor, along with other chlorinated VOCs detected, were below the TVr.

5.2.2.4. 166-168 Glen Street

On February 21, 2025, one indoor air sample was collected from each of the basement and first floor. PCE was detected above laboratory reporting limits in both samples. Additionally, trans-1,2-DCE was detected above laboratory reporting limits in the basement sample. Concentrations of chlorinated VOCs were less than TVr.

5.2.2.5. 17 Knowlton Street

On March 6, 2025, one indoor air sample was collected from each of the basement and first floor. PCE was detected above laboratory reporting limits in both samples but below TVr.

5.2.2.6. 32 Knowlton Street

On February 28, 2025, one indoor air sample was collected from each of the basement and the first floor. PCE was detected above laboratory reporting limits in both samples but below TVr.

5.2.2.7. 34 Knowlton Street

On February 25, 2025, one indoor air sample was collected from each of the basement and the first floor. During sampling, the regulator used to collect the sample from the first floor malfunctioned, and the sample was not able to be analyzed by the laboratory. We returned on April 9, 2025, and collected one indoor air sample on the first floor. PCE was detected above laboratory reporting limits in the first-floor sample. Additionally, trans-1,2-DCE was detected above laboratory reporting limits in both samples. Concentrations of chlorinated VOCs were below TVr.

5.2.2.8. 10 Morton Street

On March 18, 2025, one indoor air sample was collected from each of the basement and the first floor. PCE was detected above laboratory reporting limits in the first-floor sample but below TVr.

Trans-1,2-DCE was detected above laboratory reporting limits in first floor and basement samples at concentrations of $159 \mu\text{g}/\text{m}^3$ and $25.3 \mu\text{g}/\text{m}^3$, respectively. The concentrations of trans 1,2 DCE in both the first floor and basement samples are greater than the applicable TVr. It is likely that the trans-1,2-DCE is not associated with the disposal site and is attributed with the polyurethane spray foam used during home renovation which is discussed further in 10 Morton Street RAM Status Report No. 4 submitted in May 2025 to MassDEP.

5.2.2.9. 11 Morton Street

On April 8, 2025, one indoor air sample was collected from each of the basement and the first floor. During sampling, the regulator used to collect the sample in the basement malfunctioned, and the sample was not able to be analyzed by the laboratory. GEI returned on May 7 to recollect both the first

floor and basement indoor air samples. PCE was detected above laboratory reporting limits in both the first floor and basement samples during the May 2025 sampling, but it was not detected in the first-floor sample during the April 2025 sampling. The concentrations of PCE detected were below TVr.

TCE was detected at a concentration of $0.269 \mu\text{g}/\text{m}^3$ in the basement during the May 2025 sampling which is below the TVr. TCE was detected on the first floor in both the April and May 2025 sampling events at concentrations of $1.05 \mu\text{g}/\text{m}^3$ and $2.77 \mu\text{g}/\text{m}^3$, respectively, which are above the TVr but at concentrations that pose NSR based on the MCP Shortform. One of the residents of this property is an artist, and there are significant amounts of art supplies in the home that could be contributing to these results. Soil vapor samples were not collected at the time of indoor air sampling.

GEI is further investigating the potential source of the TCE on the first floor since it is significantly higher than the concentration of TCE detected in the basement and at other properties within the disposal Site. Though the concentrations of TCE identified on the first floor of this unit do not appear to be Site-related, GEI has nevertheless arranged for an air purifying unit to be installed on the first floor of 11 Morton Street out of an abundance of caution. We installed two sub-slab soil vapor monitoring points on July 16, 2025, and collected sub-slab soil vapor samples. We also collected indoor air samples, prior to deploying the APU, from the basement and first floors. The results of the sampling will be included in the next status report.

5.2.2.10. 19-19A Morton Street

On February 27, 2025, one indoor air sample was collected from each of the basement and the first floor. PCE was detected above laboratory reporting limits in both samples but below TVr.

5.2.2.11. 21 Morton Street and 156 Glen Street

On February 19, 2025, one indoor air sample was collected from each of the basement and the first floor of both the 21 Morton and 156 Glen Street portions of the residence (a total of four samples). Concentrations of chlorinated VOCs were not detected above laboratory reporting limits in any of the samples.

5.2.2.12 31 Tufts Street

On February 19, 2025, five indoor air samples were collected on the first floor in each of the four units and in the utility room. One week prior to collecting the soil vapor samples the venting system was closed to simulate conditions in the absence of passive venting. PCE was detected above laboratory reporting limits in samples IA-2 (Unit 101) and IA-3 (utility room). Trans-1,2-DCE was detected above laboratory reporting limits in sample IA-1 (Unit 104). Concentrations of chlorinated VOCs were below TVr.

5.2.2.12. 103 Washington Street

On February 11, 2025, one indoor air sample was collected from each of the basement, the first floor, Unit 1 on the second floor and the second-floor hallway for a total of four samples. On February 21, 2025, one indoor air sample was collected again on the first floor because the regulator used to collect the sample from the first floor on February 11 malfunctioned, and the sample was not able to be

analyzed by the laboratory. PCE was detected above laboratory reporting limits in samples from the basement, Unit 1 on the second floor, and in the sample from the second-floor hallway, but concentrations at each location were below the TVr.

5.2.2.13. 105 Washington Street

On February 11, 2025, two indoor air samples were collected in the basement, one sample was collected in the first-floor commercial space, and one sample was collected from the hallway on the second floor. PCE was detected above laboratory reporting limits in all four samples. Trans-1,2-DCE was also detected above laboratory reporting limits in the first-floor sample. Concentrations of all chlorinated VOCs detected were below the TVr.

5.3. Meteorological Conditions

Measurements were taken with a portable barometer and thermometer during soil vapor sampling at and were recorded on the Indoor Air and Sub-Slab Sampling Checklists (Appendix G). Meteorological conditions recorded during indoor air sampling events for this reporting period are summarized in Table 5-23

6. Capuano Center

6.1. Background

The mitigation system at the Capuano Center is an SSDS with 18 sub-slab extraction points in six classrooms of the east wing. The interior slab/exterior wall joints of the six classrooms were sealed with a flexible epoxy sealant and extraction points were installed horizontally through the exterior wall. GEI began operating the SSDS on February 1, 2007.

The system sub-slab vapor extraction points are attached to three collection headers in exterior underground trenches, which are connected to three dedicated discharge pipes with radon fans for each collection header above the roofline of the Capuano Center. Remote telemetry on the system consists of two radio nodes and three pressure switches connected to the three radon fans to send notification of a system shut down remotely to the wireless remote monitoring hub located at the Property.

The system does not include off-gas treatment. Based upon the measured flow rate and VOC concentrations, the annual discharge rate of VOCs from the system has been significantly less than 100 lbs per year; therefore, off-gas treatment is not required per MassDEP Policy No. WSC-94-150: "Off-gas Treatment of Point-Source Remedial Air Emissions," dated 1994.

6.2. Remedial Objectives

The design objectives of the Capuano Center mitigation system were to:

- Eliminate or mitigate, to the extent feasible, the potential soil vapor migration pathway to indoor air.
- Achieve a condition of NSR for occupants of the Capuano Center.

The SSDS monitoring data show that the sub-slab vacuum field generated by the SSDS influences the southern portion of the east wing. In conjunction with the physical sealing of the slab/wall joint, this indicates the soil vapor migration pathway to indoor air is controlled by the system.

6.3. Inspection and Monitoring

The system has been monitored in accordance with the requirements and schedule in the Phase IV RIP, and in accordance with the requirements and schedule presented in subsequent Phase IV Status Reports, and the Phase IV FIR/Phase V ROS.

Monitoring of the system was historically performed monthly; however, once telemetry was installed on the system, GEI began performing quarterly monitoring in July 2015. Monitoring of system parameters at the headers (flow rate, vacuum, and photoionization detector [PID] readings) and PID readings at outdoor monitoring points are conducted quarterly. Inspection and monitoring at the Capuano Center were performed twice from December 2024 to June 2025. A summary of monitoring activities conducted during this reporting period is in Table 6-1 and the Field Monitoring Forms are in Appendix H.

6.4. System Modifications

On January 3, 2025, GEI replaced and adjusted the pressure switches at the fans installed due to inconsistent readings from the telemetry system. On February 21, 2025, we replaced the battery in the radio node.

6.5. Performance Efficiency and Effectiveness

GEI has completed 24 rounds of indoor air sampling in the Capuano Center. The results of each round of sampling show that the system is meeting remedial design objectives (Table 6-2). Based on the indoor air testing results, and regularly collected system performance data, the soil vapor migration pathway to indoor air has been eliminated and a condition of NSR has been achieved for occupants of the Capuano Center. GEI has discontinued indoor air sampling and relies on monitoring of operating parameters for the system to confirm continued effectiveness.

6.6. Management of Waste Materials

No waste materials were managed at the Capuano Center during this reporting period.

6.7. Future Phase V Activities

Based on indoor air testing results, a condition of NSR has been achieved for occupants of the Capuano Center and the system is achieving the remedial design objectives. Since remote telemetry is now installed on the system, GEI will continue to monitor operational parameters and sub-slab conditions for the system (e.g., flow rate, vacuum), and collect readings from all outdoor monitoring points quarterly, to confirm ongoing system performance. GEI discontinued monitoring at interior monitoring points in April 2016 and instead relies on vacuum monitoring at exterior monitoring points to evaluate system effectiveness. During monitoring events, GEI will also perform maintenance tasks, which may include draining accumulated water from the collection headers and correcting any issues observed during routine inspection of system components.

6.7.1. Longest Allowable Duration of AEPMM Shutdown

An operating regime and OMM plan for the Capuano Center AEPMM were included in the Phase IV FIR/Phase V ROS submitted on August 4, 2011. In accordance with the MCP (310 CMR 40.1026[3][e]), and as presented in Status Report No. 7 and RMR No. 22, the longest duration of a shutdown that would be consistent with a level of exposure that does not pose an IH and that poses NSR is 6 years for the Capuano Center system.

6.7.2. Regulatory Closure

As discussed further in Section 7.7, a Permanent Solution with Conditions can be achieved for properties where an AEPMM has achieved the remedial objectives, an AUL has been recorded for the property, and telemetry is installed. A Partial Permanent Solution with Conditions Statement may be submitted to achieve regulatory closure for the Capuano Center if the owner of the property, the City of Somerville, executes an AUL.

7. Residential and Commercial Properties

7.1. 103 and 105 Washington Street

The properties at 103 and 105 Washington Street have been redeveloped into mixed-use commercial and residential buildings by the same entity without the installation of an EPMM and GEI has been evaluating the likelihood of a complete vapor intrusion pathway.

7.1.1. 103 Washington Street

The building at 103 Washington Street, formerly an automobile repair shop, was demolished around March 2019. The former AEPMM was deactivated in May 2017 when the building was vacated. 103 Washington Street has been redeveloped as a mixed-use development with commercial space and open-air parking on the first floor and residential units above. GEI reached out numerous times to the developer regarding installing a vapor mitigation system at 103 Washington Street. The developer did not agree to installation of a system, although they did consent to soil gas and indoor air testing. As of February 2024, construction was complete, and the building occupied. GEI has conducted indoor air and sub-slab soil vapor sampling in May 2023, July 2023, March 2024, December 2024, and February 2025. Based on the results of the sampling and a Method 3 Risk Characterization, GEI prepared and submitted to MassDEP a Partial Permanent Solution with No Conditions Statement in June 2025.

7.1.2. 105 Washington Street

The building at 105 Washington Street, formerly a multi-family house, was demolished between March and June 2019 and construction on the development began in July 2019. As of June 2022, construction was complete, and the building is occupied. 105 Washington Street is a mixed-use development with commercial space and open-air parking on the first floor and residential units above. GEI has conducted indoor air and sub-slab soil vapor sampling in August 2021, March 2022, February 2023, May 2023, December 2024, and February 2025. Based on the results of the sampling, GEI will prepare a Partial Permanent Solution Statement for the Property.

7.2. EPMM Status

Through June 15, 2025, EPMMs have been installed or are being installed at 24 residential and commercial properties. Currently EPMMs are relied upon to meet the remedial objectives at 20 properties and are not being relied on at the following:

- The EPMM at 103 Washington Street, as discussed in Section 7.1.1, was abandoned when the building was vacated and then demolished as part of redevelopment. The redevelopment of the mixed-use building at 103 Washington Street did not include an EPMM because the new owner declined offers to include one.
- An EPMM was installed at 163 Glen Street when the former American Legion Post building was redeveloped as multi-family housing. It was later demonstrated that the EPMM was not required based on sub-slab soil gas sampling results that were below residential SSGSV.

- The EPMM at 10 Morton Street was temporarily removed during building renovation activities. A new EPMM has since been installed, as discussed in Section 6.5.1.1.
- An EPMM is in the process of being installed at 121 Washington Street, a mixed-use building with retail space on the ground floor and residences above but is not yet complete, as discussed in Section 6.5.3.1.

Fig. 7-1 shows the buildings with EPMMs installed. Table 7-1 presents the as-built design information for each installed EPMM. EPMMs were also installed at 50 Tufts Street, 60 Tufts Street, and the Capuano Center. The EPMMs at 50 Tufts Street, 60 Tufts Street, and the Capuano Center are discussed separately in this report.

The EPMM designs are categorized as Option 1, Option 2, Option 3, or Option 4, as conceptually defined below:

- Option 1 – SSDS: This option includes the installation of one or more sub-slab vapor extraction points and a collection piping network connected to an electric fan located outside the building envelope. The fan is equipped with a condensate bypass drain and the fan exhaust is discharged above the eave line of the roof. To date, no SSDSs (except for the system at the Property) require off-gas treatment. This option is installed in buildings with adequate sub-slab air flow and a competent concrete slab, or those properties where vapor barrier and venting systems are infeasible.
- Option 2 – Vapor Trench: The vapor trench option is a sub-slab venting system installed in a shallow trench around the interior basement perimeter, cement stucco applied to the walls, and an epoxy vapor barrier applied to the slab and stucco walls. The trench is backfilled with crushed stone and finished with approximately three inches of new concrete to meet the existing slab surface. This option is installed in buildings with poor sub-slab air flow, a competent concrete slab, and a fieldstone and/or brick foundation. Sub-slab vapors are vented through a piping network that exits the building envelope at the sill elevation and terminates above the eave line of the roof.
- Option 3 – New Slab: The new slab installation option is a new concrete slab, a sub-slab vapor barrier, and a floor venting system; applying cement stucco to the walls; and applying an epoxy vapor barrier to the new slab and stucco walls. This option is installed in buildings with poor sub-slab air flow, an incompetent concrete slab, and a fieldstone and/or brick foundation. As with Option 2, sub-slab vapors are vented through a piping network that exits the building envelope at the sill elevation and terminates above the eave line of the roof.
- Option 4 – Passive Vapor Mitigation in New Construction: This option has been installed in new construction buildings. A sub-slab venting system installed in gravel with riser pipes through the roof, a sub-slab vapor barrier, and new concrete floor. This option can be converted to an active system.

The decision-making process for selecting a conceptual design based on Site-specific conditions is illustrated in Fig. 7-2. Table 7-1 identifies the design option for each EPMM currently installed and the primary engineering components of each.

7.2.1. Remedial Objectives

The design objectives of the EPMMs were to:

- Eliminate or mitigate, to the extent feasible, the potential soil vapor migration pathway to indoor air in residential buildings.
- Achieve a condition of NSR for occupants of the residence or commercial building.

7.3. Option 1 EPMMs (SSDS)

Option 1 EPMMs consist of active sub-slab depressurization achieved by the installation of a radon fan and associated network of piping. Several of the Option 1 EPMMs were originally installed as Option 2 or Option 3 EPMMs; however, the concentrations of PCE measured in the post-installation indoor air did not constitute a condition of NSR, and a fan was installed. Option 1 EPMMs are installed at the following 10 properties:

- | | |
|-------------------------|----------------------|
| • 35-37 Knowlton Street | • 95 Franklin Street |
| • 31-33 Knowlton Street | • 9 Knowlton Street |
| • 13 Morton Street | • 13 Knowlton Street |
| • 18 Morton Street | • 27 Tufts Street |
| • 23 Tufts Street | |

Prior to the MCP amendments effective June 20, 2014, these properties could not achieve a Permanent Solution because of the operation of an active system. These properties can now achieve regulatory closure with a Partial PSS with Conditions, provided that the property owner executes an AUL. The condition associated with the PSS would be operation and maintenance of the AEPMM in accordance with the AUL.

7.3.1. Operation and Monitoring

To confirm the performance of an EPMM, indoor air samples are collected shortly after installation is complete. As identified in the Phase IV FIR/Phase V ROS for Option 1 EPMMs, following the initial post-installation indoor air sampling, indoor air samples were collected one time per winter for two consecutive years. In accordance with MassDEP guidance, “WSC No. 16-435: Vapor Intrusion Guidance: Site Assessment, Mitigation and Closure,” dated October 14, 2016 (2016 VI Guidance), GEI modified the post-installation indoor air sampling for newly installed Option 1 EPMMs to demonstrate effectiveness. Once a pressure differential has been established, one round of indoor air sampling is performed during the heating season. The samples are analyzed for Site-specific chlorinated VOCs. Following one round of indoor air sampling, differential pressure across the slab will be used to demonstrate system effectiveness.

Inspection and monitoring also includes measuring VOCs at sub-slab sampling points with a PID, collecting pressure measurements using a manometer, and inspecting system components. If needed, repairs or modifications will be scheduled.

A summary of OMM activities performed for Option 1 EPMMs during this reporting period is in Table 7-2. During this reporting period GEI conducted one EPMM inspection at 27 Tufts Street. The EPMM Inspection Form is in Appendix I.

7.3.2. EPMM Shutdown

At the request of the property owners at 9 Knowlton Street and 13 Knowlton Street, GEI is evaluating if the operation of the Option 1 EPMMs are required to maintain a condition of NSR.

7.3.2.1. AEPMM Closure Testing at 9 Knowlton Street

On May 11, 2022, a shutdown valve was installed on the SSDS riser pipe at 9 Knowlton Street. To simulate conditions without operation of the AEPMM, the SSDS fan was turned off and the shutdown valve was closed, for six weeks, prior to collecting soil vapor and indoor air samples in June 2022. The SSDS fan was turned off and the shutdown valve was closed, for one week, prior to collecting additional rounds of soil vapor and indoor air samples in January and March 2023.

After the indoor air and soil vapor sampling was completed, the shutdown valve was opened, and GEI requested that the owner reactivate the fan. Based on the results of the Option 1 EPMM closure sampling, GEI will evaluate the need for an AEPMM to achieve a condition of NSR at 9 Knowlton Street based on a Method 3 Risk Characterization.

7.3.2.2. AEPMM Closure Testing at 13 Knowlton Street

On November 1, 2016, a shutdown valve was installed on the SSDS riser pipe at 13 Knowlton Street. To simulate conditions without operation of the AEPMM, the SSDS fan was turned off and the shutdown valve was closed, for one week, prior to collecting soil vapor and indoor air samples in December 2016, February 2018, March and November 2019, and January 2023.

After the indoor air and soil vapor sampling was completed, the shutdown valve was opened, and the fan was reactivated. Based on the results of the Option 1 EPMM closure sampling, GEI will evaluate the need for an AEPMM to achieve a condition of NSR at 9 Knowlton Street based on a Method 3 Risk Characterization.

7.3.3. Longest Allowable Duration of AEPMM Shutdown

An operating regime for residential AEPMMs was included in the Phase IV FIR/Phase V ROS submitted on August 4, 2011, which included an OMM plan for the systems. In accordance with the MCP (310 CMR 40.1026[3][f]), and as presented in Status Report No. 7 and RMR No. 22, the following exposure durations were calculated for Option 1 EPMMs where pre-EPMM indoor air data were available:

- 13 Knowlton Street: 54 years
- 23 Tufts Street: 11 years
- 27 Tufts Street: 25 years

- 31-33 Knowlton Street: 31 years
- 35-37 Knowlton Street: 4 years

Several Option 1 EPMMs were installed based on sub-slab soil vapor results, and pre-EPMM indoor air data are not available (including 13 Morton Street, 18 Morton Street, 95 Franklin Street, and 9 Knowlton Street). However, based on the proximity of the AEPMMs throughout the Site, the shutdown exposure durations calculated for the properties with pre-AEPMM indoor air data are likely representative of the AEPMM properties with no pre-AEPMM indoor air data. Therefore, the longest duration of shutdown that would be consistent with a level of exposure that does not pose an IH and that poses NSR at these properties is likely between 4 and 54 years.

7.3.4. Efficiency and Effectiveness

The remedial objectives of the EPMMs were defined the Phase IV:

- Eliminate or mitigate, to the extent feasible, the potential soil vapor exposure pathway to indoor air.
- Achieve a condition of NSR for occupants of the residence or commercial building.

Through June 15, 2025, the results of post-EPMM installation indoor air sampling and monitoring indicate that each of the Option 1 EPMMs installed or activated at residential and commercial properties has achieved the remedial objectives.

7.3.5. System Maintenance and Modifications

In February 2025, GEI replaced the battery in the radio node at 27 Tufts Street during the EPMM inspection.

GEI has been evaluating the current telemetry system in consideration of the 2024 MCP amendments. The 2024 amendments include continual monitoring of system vacuum. However, GEI understands that properties where telemetry systems are already registered with MassDEP will be grandfathered in (310 CMR 40.1026[3][d][6], effective March 1, 2024), are not required to report system vacuum.

If a property is to be closed with a Partial Permanent Solution with Conditions requiring an AUL, hardware changes at residences will be necessary, including replacing the radio node on the exterior of the house and replacing vacuum pressure switches with vacuum pressure transducers in the basement of each residence. These modifications will require GEI to access the interior of residences. Should this option be selected for closure in the future, GEI will coordinate with property owners at that time to perform the required system modifications.

7.3.6. Management of Waste Materials

No waste materials associated with Option 1 EPMMs were generated during the reporting period.

7.4. Option 2 and 3 EPMMs (Vapor Trench and/or New Slab)

Option 2 and 3 EPMMs consist of passive vapor mitigation and do not require mechanical operation or maintenance. Option 2 or 3 EPMMs have been installed at the following 9 properties:

- 95R Franklin Street (Option 2)
- 12 Morton Street (Option 3)
- 11 Morton Street (Option 2)
- 4 Morton Street (Option 3)
- 91-93 Franklin Street (Option 3)
- 17 Knowlton Street (Option 3)
- 32 Knowlton Street (Option 3)
- 19-19A Morton Street (Option 3)
- 166-168 Glen Street (Option 3)

In accordance with the MCP (310 CMR 40.1000) prior to the June 20, 2014 MCP amendments, regulatory closure was achieved with a Class A-3 Response Action Outcome Partial (RAO-P) Statement for several properties with an Option 2 or 3 EPMM. The properties that have achieved a Class A-3 RAO-P are presented in Fig. 7-3. In the amended MCP, the term “Response Action Outcome” has been replaced with “Permanent or Temporary Solution.” Subsequent regulatory closure for individual properties with Option 2 or 3 EPMMs will be achieved with Partial PSSs with Conditions. The condition associated with the PSSs with Conditions will be maintenance of the passive EPMM in accordance with an AUL.

7.4.1. Operation and Monitoring

To confirm the performance of an EPMM, indoor air samples were collected shortly after installation was completed. As identified in the Phase IV FIR/Phase V ROS for Option 2 and 3 EPMMs, following the initial post-installation indoor air sampling, indoor air samples were collected two times per year (including one winter sample) for two consecutive years. Samples were analyzed for Site-specific chlorinated VOCs.

Following the completion of post-installation indoor air sampling, annual inspection is conducted including inspecting system components. If needed, repairs or modifications are scheduled.

A summary of OMM activities performed for Option 2 and 3 EPMMs during this reporting period is in Table 7-2. During this reporting period GEI did not conduct EPMM inspections at any Option 2 or Option 3 properties. GEI was unable to access 4 Morton Street and 95R Franklin Street during the reporting period. GEI will continue its attempts to obtain access for EPMM inspections at these properties during the next reporting period. Additionally, GEI collected indoor air samples from Option 2 and Option 3 residences during this reporting period including: 91-93 Franklin Street, 17 Knowlton Street, 32 Knowlton Street, 166-168 Glen Street, 11 Morton Street, and 19-19A Morton Street as described in Section 5.2.

7.4.2. Efficiency and Effectiveness

The remedial objectives of the EPMMs were defined the Phase IV:

- Eliminate or mitigate, to the extent feasible, the potential soil vapor exposure pathway to indoor air.

- Achieve a condition of NSR for occupants of the residence or commercial building.

Through June 15, 2025, the results of post-EPMM installation indoor air sampling indicate that the Option 2 or 3 EPMMs currently installed at residential properties have achieved the remedial objectives.

7.4.3. System Maintenance and Modifications

No modifications were made to systems during the reporting period.

7.4.4. Management of Waste Materials

No waste materials associated with Option 2 or 3 EPMMs were generated during the reporting period.

7.5. Option 4 EPMMs (Passive Vapor Mitigation in New Construction)

Option 4 EPMMs consist of passive vapor mitigation installed in renovation or new construction and do not require mechanical operation or maintenance. Option 4 EPMMs have been installed at the following properties:

- 10 Morton Street (previously Option 3)
- 163 Glen Street (demonstrated to be not required)
- 34 Knowlton Street (previously listed under Option 3)
- 31 Tufts Street
- 121 Washington Street (in progress)

An EPMM was installed at 163 Glen Street when the former American Legion Post building was redeveloped as multifamily housing. It was demonstrated that the EPMM was not required based on sub slab soil gas sampling results that were below residential SSGSV.

Regulatory closure for individual properties with Option 4 EPMMs will be achieved with Partial PSS with Conditions. The condition associated with the PSSs with Conditions will be maintenance of the passive EPMM in accordance with an AUL.

7.5.1. Operation and Monitoring

To confirm the performance of an EPMM, indoor air samples are collected shortly after installation is complete. Option 4 EPMMs have been conducted as RAMs, and post-installation indoor air sampling for newly installed Option 4 EPMMs to demonstrate effectiveness has been conducted in accordance with MassDEP 2016 VI Guidance:

- If groundwater concentrations are less than two times the Method 1 GW-2 standard, and sub-slab soil gas concentrations are less than two times soil gas screening values, and indoor air concentrations are less than two times threshold values (TVs), GEI performs 2 rounds of indoor air sampling, with one round occurring during the heating season.

- If groundwater concentrations are greater than two times the Method 1 GW-2 standard, and/or sub-slab soil gas concentrations are greater than two times soil gas screening values, and/or indoor air concentrations are greater than two times TVs, GEI performs quarterly indoor air sampling, with two rounds occurring during the heating season.

Additional indoor air sampling beyond the first year may be performed based on property-specific conditions. Samples will be analyzed for Site-specific chlorinated VOCs. During indoor air sampling, the condition of the EPMM will be inspected and, if needed, repairs or modifications will be scheduled.

Following the completion of post-installation indoor air sampling, annual inspection includes inspecting system components. If needed, repairs or modifications will be scheduled.

A summary of OMM activities performed for Option 4 EPMMs during this reporting period is presented in Table 7-2. GEI conducted indoor air testing at: 31 Tufts Street, 34 Knowlton Street, and 10 Morton Street during this reporting period as described in Section 5.2..

7.5.1.1. 10 Morton Street Renovation

GEI was made aware of a property sale for 10 Morton Street on February 14, 2023, through contact with the new homeowner. The new homeowners indicated that they had plans to renovate the basement of the home. To evaluate the need for the continued presence of the EPMM installed beneath the slab, four soil vapor points were installed and sampled in March and April 2023. GEI submitted a RAM Plan to address contemplated changes to activities and uses of the Property as they relate to the previously-installed EPMM in June 2023. A RAM Plan Modification was submitted in November 2023 to provide for a sub-slab venting system and 20 mil vapor barrier to be installed during renovations and for post installation sub-slab soil gas and indoor air testing to be conducted to evaluate whether an EPMM and an AUL are required to maintain a condition of NSR. Details of the vapor mitigation system installation, smoke testing, sub-slab point installation, and sub-slab soil gas sampling were included in RAM Status Reports.

7.5.1.2. 31 Tufts Street

The property at 31 Tufts Street, formerly a paved parking lot, has been redeveloped as multi-family housing. 31 Tufts Street LLC and Tufts Glen Pocket Park LLC are currently joint owners of the property. MassDEP assigned RTN 3-37468 to the 31 Tufts Street property based on concentrations of polycyclic aromatic hydrocarbons (PAHs) and metals exceeding the applicable MassDEP reportable concentrations in soil (RCS-1) standards. These conditions are not attributable to the 50 Tufts Street Site. GEI submitted a RAM Plan on behalf of the owner for response actions in connection with construction, including soil management and installation of a vapor barrier and a sub-slab ventilation piping network beneath the building. In December 2023, GEI submitted a RAM Completion Report and Permanent Solution Statement for RTN 3-37468.

GEI has conducted four rounds of sub-slab soil vapor and indoor air sampling as discussed in Section 5.

We will continue coordinating with the owner of the property to perform additional sub-slab soil vapor and indoor air testing with the venting closed in summer/fall 2025.

7.5.2. Efficiency and Effectiveness

The remedial objectives of the EPEMs were defined the Phase IV:

- Eliminate or mitigate, to the extent feasible, the potential soil vapor exposure pathway to indoor air.
- Achieve a condition of NSR for occupants of the residence or commercial building.

Through June 15, 2025, the results of post-EPMM installation indoor air sampling indicate that the Option 4 EPMMs currently installed at residential properties have achieved the remedial objectives.

7.5.3. System Maintenance and Modifications

Construction and installation of the EPMM at 121 Washington Street is ongoing.

7.5.3.1. 121 Washington Street

The property at 121 Washington Street is being redeveloped into residential apartment units. A small commercial building and paved parking formerly occupied property. The building was demolished in October 2020. As of December 2024, most of the building envelope is complete. GEI submitted a RAM Plan on behalf of the owner (Wooden Teeth, LLC) on March 12, 2024. The RAM consists of the installation of installation of a vapor barrier and a sub-slab ventilation piping network beneath the building. Details of the vapor mitigation system installation and smoke testing were included in RAM Status Reports.

7.5.4. Management of Waste Materials

No waste materials associated with Option 4 EPMMs were generated during the reporting period.

7.6. Activity and Use Limitations

It is anticipated that AULs may be warranted for each property where an EPMM is installed, and it is determined that the EPMM is necessary long-term. No AULs were recorded during this reporting period.

7.7. Permanent Solution Statements

GEI evaluates the groundwater chemical testing results collected during MNA activities to update and supplement the plume stability monitoring and natural attenuation evaluation, as presented in the Phase II CSA / Phase III RAP report. GEI is currently updating the MNA evaluation which indicates that the groundwater plume is stable, groundwater concentrations are decreasing in portions of the plume, and natural attenuation processes are occurring at the Site which are reducing contaminant concentrations in groundwater over time. Although there has been an increase in PCE concentrations in groundwater in select wells (GEO-6, MW104, MW112A and MW122), some of which may be due to relocation of the core of the plume caused by construction dewatering conducted by the MBTA, in general the dissolved-phase groundwater plumes and vapor plumes are stable and are not causing an increase in concentrations of VOCs in groundwater, soil, soil vapor, or indoor air. Natural attenuation processes are balancing contaminant levels. As discussed in Section 4.4, GEI will be installing additional groundwater

monitoring wells to better characterize these localized changes in the plume and will be collecting additional groundwater samples to further evaluate the attenuation of the plume over time.

Visible DNAPL has not been observed at the Site, although based on lines of evidence, it is likely that DNAPL is present in overburden at portions of the Site. Any DNAPLs that may be present are no longer migrating and have reached a stable configuration because of capillary trapping forces. The stability of these DNAPL sources is supported by groundwater concentration data collected from monitoring wells within the area of DNAPL occurrence. The Phase III demonstrated that it is not feasible to eliminate DNAPL at the Site. There are no unpermitted releases of OHM at the Site. Accordingly, all sources of OHM at the Site have been eliminated or controlled to the extent feasible.

The Updated 2015 Method 3 Risk Characterization that ARCADIS prepared was presented in Phase V Status Report No. 8 and RMR No. 23. The Updated 2015 Method 3 Risk Characterization incorporated updated soil, groundwater, and indoor air data sets, and included updated MassDEP toxicity information, particularly for PCE and TCE. GEI also routinely performs Method 3 risk screening for additional indoor air data collected since 2015. Based on these risk evaluations, a condition of NSR exists for current and future building occupants at each property within the Site. Based on the Updated 2015 Method 3 Risk Characterization, a condition of NSR does not exist for future construction workers performing excavations at the Property or within the MBTA ROW. The inhalation of excavation air pathway associated with the MassDEP change in TCE toxicity is the main driver of potential risks for construction workers in both exposure areas. However, these construction worker risks can and should be managed with a Health and Safety Plan (HASP) that is prepared and implemented prior to subsurface work in these exposure areas.

A condition of NSR has been demonstrated at individual properties based on adequate data collected to reflect temporal variability of contaminant levels in indoor air, sub-slab soil gas and groundwater. These individual properties are eligible for a Partial PSS in accordance with the MCP (310 CMR 40.1000). The filing of a Partial PSS for an individual property documents the achievement of regulatory closure under the MCP for that property. Therefore, the Phase V provisions do not apply to properties for which an RAO-P or Partial PSS has been submitted.

The properties that have achieved a Partial PSS are shown on Fig. 7-3. A Partial Permanent Solution Statement was submitted for the property at 103 Washington Street on June 13, 2025.

7.7.1. Permanent Solution without Conditions

GEI will prepare a Partial PSS without Conditions for residences where multiple lines of evidence have demonstrated the absence of a soil vapor migration pathway to indoor air and an EPMM is not required. GEI will also prepare Partial PSSs for residences where a Method 3 Risk Characterization, based on multiple rounds of sampling, indicated that concentrations of chlorinated VOCs in indoor air constitute NSR. In addition, GEI will prepare a Partial PSS without Conditions for the portion of the Site occupied by public rights-of-way. The properties that have achieved a Partial PSS without Conditions are shown in Fig. 7-3.

7.7.2. *Permanent Solution with Conditions*

Active operation and maintenance is required for Option 1 EPMMs. Based on the MCP amendments effective June 20, 2014, a PSS with Conditions can be achieved for properties with an Option 1 EPMM. The condition associated with the PSSs with Conditions would be maintenance of the EPMM in accordance with an AUL.

GEI will attempt to record an AUL at each property with an EPMM to maintain the integrity of the EPMM. No new AULs were recorded during the reporting period. After an AUL is recorded, GEI will prepare a Partial PSS with Conditions for residential properties with Option 1, 2 or Option 3 EPMMs where 2 years of post-installation indoor air samples have demonstrated that the EPMM is effective. Following the post-installation indoor air sampling, GEI will continue annual inspections of EPMMs as provided for in the Phase IV RIP. The properties that have achieved a Partial PSS with Conditions are shown in Fig. 7-3. If a property owner does not execute an AUL, inspections will continue as Phase V activities.

7.8. Future Phase V Activities

7.8.1. *EPMM Operation and Monitoring*

The results of post-EPMM installation indoor air sampling indicate that the Option 1, 2, 3 and 4 EPMMs installed at the Site have achieved the remedial objectives. GEI will continue to conduct annual OMM activities for installed EPMMs where sufficient indoor air sampling has been conducted, but not repeat indoor air testing, unless requested.

GEI has been communicating with property developers for 31 Tufts Street and 121 Washington Street. An EPMM has been installed at 31 Tufts Street and an EPMM is in the process of being installed at 121 Washington Street. GEI will plan with the property owners to continue the operation and monitoring program outlined in Section 7.5.

7.8.2. *EPMM Modifications*

As discussed in Section 7.3, remote telemetry has been installed at each Option 1 EPMM except for 9 Knowlton Street. The owner of 9 Knowlton Street has been unresponsive to telemetry access request letters, telephone calls, and property visits. Therefore, it is currently infeasible to install telemetry at the property.

As discussed in Section 7.5.1, 10 Morton Street is being renovated and installation of the new EPMM in the modification was completed during this reporting period.

7.8.3. *EPMM Closure Sampling*

As discussed in Section 7.3.2, GEI collected indoor air samples from 13 Knowlton Street in February 2018, March 2019, November 2019, and January 2023 and from 9 Knowlton Street in June 2022, January 2023, and March 2023 to demonstrate that the Option 1 EPMM is not required to maintain a condition of NSR.

Based on the results of the Option 1 EPMM closure sampling, GEI will continue to evaluate the need for an AEPMM to achieve a condition of NSR at 9 Knowlton and 13 Knowlton Street.

7.8.4. Installation of New EPMMs

During this reporting period, the EPMM at the 121 Washington Street development continued installation, as discussed in Section 7.5.3.

7.8.5. AULs and Permanent Solutions

As discussed in Section 7.7., the source of contamination at the Site has been controlled. If post-installation indoor air sampling at a property demonstrates that an EPMM continues to achieve the remedial objectives, then that property is eligible for a Partial PSS with Conditions.

If feasible, GEI will record AULs for each property where an EPMM is installed, and a Partial PSS with Conditions is to be issued.

Once the AULs are recorded, GEI will prepare a Partial PSS with Conditions for the properties with EPMMs. As discussed in Section 7.7, GEI will prepare Partial PSSs for those properties that did not require mitigation.

7.8.6. Future Residential Monitoring

As discussed in Section 1.4., GEI continues to attempt to contact new property owners in the Tufts Street neighborhood as property ownership turnover occurs. As discussed in Sections 5.1 and 5.2, GEI collected indoor air and sub-slab soil vapor sampling at 97 Franklin Street in February 2025; GEI will conduct an additional round of indoor air sampling in the heating season of winter 2025. GEI was able to establish contact with the owner of 84 Franklin Street and collect indoor air samples in May 2025; we will collect another round of indoor air samples in fall 2025. These efforts are documented in Appendix B.

As required by the NOAF/NON, GEI will conduct two rounds of indoor air testing at the following residences where passive EPMMs have been installed: 91 and 93 Franklin Street; 166-168 Glen Street, 17, 32 and 34 Knowlton Street; 4, 11, and 19-19A Morton Street. 91 and 93 Franklin is a single building. As discussed in Section 5.2, indoor air testing was conducted in 7 of the 8 properties between February and April 2025; however, we could not access 4 Morton Street. A second round of indoor air testing will be conducted in the fall of 2025. We will continue to attempt to access the 4 Morton Street property.

As required by the NOAF/NON, GEI will attempt to obtain access to the properties where the property owners previously refused UniFirst's offer to install a vapor mitigation system. These seven properties include: 99 Franklin Street, 192-164 Glen Street, 9, 11-13, 17, 19, and 25 Tufts Street.

8. 60 Tufts Street

8.1. Background

60 Tufts Street is a 17-unit condominium building adjacent to the Property. The mitigation system at 60 Tufts Street was designed and constructed as an SSDS. The SSDS includes 12 vertical sub-slab extraction points and 2 horizontal foundation wall extraction points connected to 2 collection headers and a 5-horsepower regenerative blower with pressure gauges, controls, and particulate filter housed in a locked metal enclosure. GEI began operation of the SSDS on April 24, 2009. A discharge pipe extends from the blower through a parking garage deck and discharges above the roofline of the building.

On July 24, 2015, remote telemetry was installed at 60 Tufts Street. The remote telemetry consists of one radio node and one pressure switch connected to the blower to send notification of a system shut down remotely to the wireless remote monitoring hub located at the Property.

The system does not include off-gas treatment. Based upon the measured flow rate and VOC concentrations, the annual discharge rate of VOCs from the system will be significantly less than 100 lbs per year; therefore, no off-gas treatment is required per MassDEP Policy No. WSC-94-150.

8.2. Remedial Objectives

The objectives of the SSDS at 60 Tufts Street are to:

- Eliminate or mitigate, to the extent feasible, the potential soil vapor migration pathway to indoor air.
- Achieve a condition of NSR for occupants of the condominium building.

8.3. Inspection and Monitoring

The system has been monitored in accordance with the requirements and schedule in the Phase IV RIP, and in accordance with the requirements and schedule presented in subsequent Phase IV Status Reports, and the Phase IV FIR/Phase V ROS.

Operational parameters for the system (e.g., flow rate, vacuum) were historically monitored monthly and indoor air quality in Units 1, 4, and 5 and sub-slab conditions were monitored for 2 years following installation of the EPMM. The Phase IV RIP provided for ongoing annual indoor air sampling. However, post-EPMM indoor air sampling and visual inspections confirmed that the EPMM at 60 Tufts Street has been constructed in accordance with the Phase IV RIP and has achieved the remedial design objectives. Accordingly, GEI no longer conducts annual indoor air testing but has continued to monitor operational parameters of the system.

Once remote telemetry was installed on the system on July 24, 2015, GEI began to perform monitoring of system parameters on a quarterly basis in July 2015. Inspection and monitoring at 60 Tufts Street was performed two times from December 2024 to June 2025. A summary of monitoring activities conducted

during this reporting period is provided in Table 8-1 and the Field Monitoring Forms are provided in Appendix H.

8.4. Performance Efficiency and Effectiveness

As presented in the Phase IV RIP and Phase IV FIR/Phase V ROS reports, the SSDS monitoring data show that the sub-slab vacuum field generated by the SSDS influences nearly the entire floor slab area. Indoor air samples were collected in Units 1, 4, and 5, which are the units closest to the ground floor, for 2 years after EPMM installation. The indoor air testing results indicated that a condition of NSR has been achieved for building occupants at 60 Tufts Street and the soil vapor migration pathway to indoor air has been mitigated to the extent feasible.

8.4.1. AEPMM Closure Testing

On March 20, 2018, a shutdown valve was installed on the SSDS riser pipe at 60 Tufts Street. To simulate conditions without operation of the AEPMM, the SSDS fan was turned off and the shutdown valve was closed for one week beginning on April 17, 2019, prior to collecting soil vapor and indoor air samples. After the indoor air sampling was completed, the shutdown valve was opened, and the blower was reactivated. The results of the indoor air and soil vapor sampling were presented in previous Phase V Status Reports.

8.5. Management of Waste Materials

No waste materials were managed at 60 Tufts Street during this reporting period.

8.6. System Modifications

No system modifications were made during the monitoring period.

8.7. Future Phase V Activities

The system is achieving the remedial design objectives and OMM activities will continue. To confirm system performance, GEI will continue to monitor operational parameters and sub-slab conditions (e.g., flow rate, vacuum) on a quarterly basis. During monitoring events, GEI will also perform maintenance tasks as needed, which may include documenting that the blower is in operation, draining accumulated water from the moisture separator or collection headers, changing the filter element for the blower, changing the batteries in the auto-dialer, and correcting any issues observed during routine inspection of system components. GEI will implement any modifications to the telemetry system that may be required.

8.7.1. EPMM Closure Sampling

As described in Section 8.4.1, GEI conducted EPMM Shutdown Sampling in 2018 and 2019. Based on pre-EPMM indoor air testing at 60 Tufts Street, and changes to the toxicological characteristics for PCE, the EPMM may not be required to maintain a condition of NSR. Additional shutdown sampling may be pursued at a later date based on the results of the previous sampling.

8.7.2. Longest Allowable Duration of AEPMM Shutdown

An operating regime for the 60 Tufts Street AEPMM was included in the Phase IV FIR/Phase V ROS submitted on August 4, 2011, which included an OMM plan for the system. In accordance with the MCP (310 CMR 40.1026[3][f]), and as presented in Status Report No. 7 and RMR No. 22, the longest duration of a shutdown that would be consistent with a level of exposure that does not pose an IH and that poses NSR is 52 years for the 60 Tufts Street property.

8.7.3. Regulatory Closure

As discussed previously in Section 7.7, a Permanent Solution with Conditions can be achieved for properties where an AEPMM has achieved the remedial objectives, an AUL has been recorded for the property, and telemetry is installed. A Partial Permanent Solution Statement with Conditions may be submitted to achieve regulatory closure for 60 Tufts Street if the condominium association for the property executes an AUL. If the last round of shutdown testing demonstrates that an AEPMM no longer is required to maintain a condition of NSR, then a Partial Permanent Solution may be achievable without an AUL.

9. 50 Tufts Street Property

9.1. Background

The remedial system at the Property was originally designed and constructed as an SSDS that includes 22 sub-slab extraction points inside the building, a 15-horsepower regenerative blower with pressure gauges, controls, and particulate filter, and three 2,000-lb activated carbon absorbers operated in series for off-gas treatment. As part of the SSDS installation, the building slab was sealed to minimize vapor transmission through the slab. The cracks and joints in the building slab were filled with flexible sealant and a two-part epoxy coating was applied to the surface of the slab. GEI began operating the SSDS on April 30, 2007.

In July and August 2007, SVE components were added to the system as part of the CRA to address residual VOCs in soil. The SVE system includes seven SVE points installed below the pavement in the north and south parking lots on the Property. The SSDS and the SVE system rely upon shared equipment, including the piping manifold, blower assembly, and off-gas treatment units. GEI began operating the SVE system on August 22, 2007.

In April 2015, a wireless telemetry hub was installed at the Property. The telemetry hub receives telemetry notification from the other AEPMMs at the Site. A radio node was also installed and connected to monitor the 50 Tufts Street system.

9.2. Remedial Objectives

The design objectives of the combined SSDS/SVE system were to:

- Eliminate or mitigate, to the extent feasible, the soil vapor migration pathway to indoor air.
- Achieve a condition of NSR for a commercial full-time worker.
- Reduce the mass of contaminants in the vadose zone.
- Control the potential migration of soil vapor from the Property to the 60 Tufts Street property.

9.3. Inspection and Monitoring

The system has been monitored in accordance with the requirements and schedule in the Phase IV RIP. Monitoring of the system was historically performed monthly; however, once telemetry was installed on the system, GEI began performing quarterly monitoring in July 2015. Operational parameters for the system (e.g., flow rate, vacuum, off-gas treatment efficiency) were monitored six times from December 2024 to June 2025. GEI also measures the vapor pressure of sub-slab extraction points and monitoring points periodically. GEI uses these sub-slab pressure measurements to confirm system effectiveness. The pipe and hose connections on the pressure side of the blower are examined during monitoring visits for potential leaks. Leaks, if encountered, are corrected immediately. Carbon change-outs are scheduled based on carbon tank monitoring data to maximize VOC adsorption while maintaining compliance with regulatory requirements regarding discharge of VOCs to the atmosphere. Procedures to address

potential spills of spent activated carbon during carbon change-outs have been developed and are presented in the system OMM Plan provided in the Phase IV RIP.

GEI performs monitoring for off-gas treatment efficiency monthly. Based on that monitoring, the system off-gas for the combined SSDS/SVE system was within permissible limits during the reporting period. A summary of monitoring activities during this reporting period is provided in Table 9-1, and Field Monitoring Forms are provided in Appendix H.

9.3.1. Granular Activated Carbon Sampling

On February 10, 2025, GEI collected one sample of the granular activated carbon (GAC) from Tank A of the off-gas treatment system. The purpose of the sampling was to facilitate acceptance at a disposal facility following change out of the spent carbon. The sample was collected by digging approximately one foot into the GAC. The sample was submitted to ESS Laboratory of Cranston, Rhode Island for analysis of VOCs, semi-volatile organic compounds (SVOCs), and VOCs and SVOCs analyzed by the Toxic Characteristic Leaching Procedure (TCLP). Concentrations of 1,1-dichloroethane, 1,1-DCE, chloroform, cis-1,2-DCE, and trichlorofluoromethane were detected above the laboratory reporting limit. No SVOCs, TCLP VOCs, or TCLP SVOCs were detected above the laboratory reporting limit. The laboratory data report is in Appendix D.

9.3.2. Soil Vapor Extraction System Sample

Due to the absence of PCE and TCE in the GAC sample, GEI collected a soil vapor sample from the influent monitoring point at the 50 Tufts Street system. The sample was collected using a SUMMA[®] canister and regulator provided by Alpha-Pace. The canister was certified clean by the laboratory. A copy of the certification is in Appendix D. The soil vapor sample was collected over a 1-hour period. A flow regulator was attached to the SUMMA[®] canister at the location of the testing. The laboratory-set flow regulator was then turned on, and the starting pressure and time recorded. The regulator was turned off before reaching ambient pressure, and the final pressure and time were recorded. The sample was analyzed for the Site-specific chlorinated VOCs list.

Concentrations of 1,1-DCE, 1,1-DCA, cis-1,2-DCE, TCA, TCE, and PCE were detected above the laboratory reporting limits. Detected concentrations of PCE were 1,140 $\mu\text{g}/\text{m}^3$. Subsequent monthly monitoring indicates that total VOCs have not been measured above 0.0 ppm from Tank B and breakthrough has not been recorded.

9.4. Performance Efficiency and Effectiveness

The SSDS monitoring data show that the sub-slab vacuum field generated by the SSDS covers most of the building slab area. In conjunction with the physical sealing of the slab, this indicates the soil vapor migration pathway to indoor air is being mitigated by the system. Based on indoor air testing results collected since the combined system has been in operation, and the Method 3 risk characterizations prepared for the Site, a condition of NSR for full-time commercial workers has been achieved for the building at the Property.

The SVE system monitoring data show that vacuum influence from the SVE points in the south parking lot extends approximately 30 feet south of the building and from the SVE points in the north parking lot extends onto 60 Tufts Street.

Three influent and two effluent samples from the carbon treatment system were collected in May 2007, June 2007, and March 2008. The results of this sampling were compared with PID field measurements to estimate the total mass of VOCs removed from soil vapor between April 2007 and May 2014. However, GEI collected more recent influent and effluent samples in February 2014. The results of the February 2014 influent and effluent sampling are a better indicator of current system conditions and were used to estimate the total mass of VOCs removed from soil vapor based on PID field measurements beginning in June 2014. Monitoring data from both the SSDS and SVE components through June 15, 2025, show that approximately 9,507 lbs (approximately 706 gallons) of VOCs have been removed from the vadose zone at the Property (Fig. 9-1).

9.5. Management of Waste Materials

Infrequently, condensate in system piping may accumulate in the moisture separator installed as part of the blower assembly. If observed, the liquid is drained from the moisture separator and dispensed to the bare ground surface at the Property so that it can infiltrate into the subsurface within the Site boundary.

Based on the previous quantities of spent carbon generated by the system, a 2023 Hazardous Waste Report was submitted to MassDEP on March 7, 2024, identifying the Property as a Large Quantity Generator (LQG) facility. GEI will submit the next biennial Hazardous Waste Report in early 2026.

No remediation waste was generated during this reporting period.

9.6. System Modifications

No system modifications were made during this reporting period.

9.7. Future Phase V Activities

The system is achieving the remedial design objectives. Phase V OMM activities will continue in accordance with the requirements and schedule set forth in the Phase IV RIP.

9.7.1. Longest Duration of AEPMM Shutdown

An operating regime for the 50 Tufts Street AEPMMs was included in the Phase IV FIR/ Phase V ROS submitted on August 4, 2011, which included an OMM plan for the system. Indoor air sampling performed at 50 Tufts Street by Geolinsight in September 2006 identified PCE concentrations ranging from 550 to 800 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$), and TCE concentrations ranging from 16 to 150 $\mu\text{g}/\text{m}^3$. In accordance with the MassDEP Fact Sheet "TCE Toxicity Information: Implications for Chronic and Shorter-Term Exposure," dated March 27, 2014, the pre-EPMM concentrations in the building would pose an IH even over a short time period, such as a matter of days. However, GEI performed indoor air sampling during an unscheduled SSDS/SVE system shutdown in March 2015. The March 2015 indoor air concentrations did not pose an IH, and TCE was not detected during the March

2015 indoor air sampling. Based on system monitoring logs, the system was likely down for slightly less than 1 month during the March 2015 shut down. This information indicates that an IH would not be present during a minor shut down of the 50 Tufts Street system. Because the building is currently occupied, sampling cannot be conducted after the system has been shut down for a full 60 days or longer, so the maximum duration for a system shutdown that might pose an IH is not known now.

GEI will continue to operate the AEPMM at 50 Tufts Street.

10. Monitored Natural Attenuation

MNA is part of the remedial strategy to reach a Permanent Solution for the Site. GEI has implemented an MNA program to confirm on-going natural attenuation is occurring at the Site. The MNA program is described in the MNA OMM Plan presented in the Phase IV RIP. The primary elements of the MNA program include:

- Plume Stability Monitoring: A groundwater sampling plan to monitor overburden and bedrock groundwater plume concentrations through time to confirm that the groundwater plumes are stable, and that overall groundwater concentrations of chlorinated VOCs are not increasing.
- Natural Attenuation Evaluation: An evaluation of overburden and bedrock groundwater plume concentrations through time for indications of the presence and rate of natural attenuation processes.

GEI is currently conducting a significant update of the MNA evaluation which will be provided under separate cover.

11. Tufts Street Reconstruction

In July 2023, the City of Somerville announced the Tufts Street Reconstruction project. GEI attended community meetings and community communication events in August and October 2023. At the time, the scope of the project included the reconstruction/ widening of sidewalks, replacement of select catch basins, realignment of Tufts Street, and repaving the road surface. GEI additionally attended a meeting with the City and their LSP (Atlas Technical Consultants LLC [Atlas]) to discuss historical contamination at the 50 Tufts Street property. The planned construction schedule was originally during the summer and fall of 2024.

On February 29, 2024, the City of Somerville announced that based on community feedback the scope of the project would expand to include the addition of planting trees and greenery. The City of Somerville stated that this would require deeper excavations and that due to the historical contamination originating at 50 Tufts Street additional shallow soil analysis was planned. The City of Somerville announced that the construction schedule has been updated to 2025 and 2026. The project was put to bid in February 2025 and awarded in March 2025.

The Tufts Street Reconstruction project website with updated communication and concept plans is:

<https://voice.somervillema.gov/tufts-street-reconstruction?preview=true>.

11.1. City of Somerville Subsurface Investigation

Based on communication with the City of Somerville and their LSP, GEI learned that a subsurface investigation consisting of eight soil borings was conducted in March 2024. Previously, the City of Somerville data was not publicly available, but was submitted as part of a Utility-Related Abatement Measure (URAM) in May 2025.

11.1.1. Utility-Related Abatement Measure

Atlas notified MassDEP on May 9, 2025, of their intent to manage contaminated soil and groundwater associated with the 50 Tufts Street Site (RTN 3-23246) as part of the Tufts Street Reconstruction Project as a Utility Release Abatement Measure (URAM). At the time of notification MassDEP assigned RTN 3-51811 to the URAM. Atlas submitted the URAM to MassDEP on May 16, 2025 (Appendix J).

The URAM summarizes the subsurface investigation Atlas conducted in March 2024, where eight soil borings (ATC-1 through ATC-8) were advanced within Tufts Street (Appendix J). Borings were pre-cleared with vacuum excavation to approximately 5 feet and then advanced using direct-push techniques (i.e., Geoprobe) to approximately 10 feet. Atlas collected two soil samples from each boring at depths of 0 to 5 feet and 5-10 feet for analysis of VOCs. Additionally, Atlas collected two composite soil samples, ATC-1 to ATC-8 0-5 feet and ATC-1 to ATC-8 5-10 feet for analysis of waste disposal parameters. The Atlas summary data tables are in Appendix J. Concentrations of VOCs (PCE) were detected in one of the sixteen soil samples (ATC-8 5-10 feet) at 0.0314 mg/kg. The borings were backfilled and patched at grade.

The URAM states that management of contaminated soil and groundwater have been integrated into the design and the specifications for the project. The URAM states that the contractor must have a health and safety plan in place and if required be prepared to upgrade personal protective equipment (PPE) to Level C. Additionally, check dams are required to be installed within the drainage pipe alignment every 30 feet to mitigate the potential for contaminated groundwater migration. The URAM also stated that to support off-site soil management, a Contained-In-Determination (CID) was submitted to MassDEP in May 2025.

11.1.2. Contained-In Determination

Atlas submitted a CID to MassDEP on May 19, 2025. The CID stated that work for the Tufts Street Reconstruction Project is mostly located within the limits of the 50 Tufts Street Site and therefore they were submitting a CID to reclassify soil with detected concentrations of chlorinated VOCs as appropriate for disposal at an in-state landfill. The CID summarized the subsurface investigation conducted in March 2024. Based on Atlas's data from March 2024 and GEI's February 2024 soil data, Atlas requested that all soil within the right-of-way, except for a limited area in front of the 50 Tufts Street building, be declassified as hazardous waste (Appendix J). The CID stated the limited area in front of the building would be excluded due to elevated concentrations of PCE from GEI's February 2024 soil sampling.

11.2. 50 Tufts Street Soil Borings and Soil Samplings

Based on discussions with UniFirst, on February 12, 2024, GEI observed Northern advance five soil borings (50TUFT-B101 through 50TUFT-B105) on the 50 Tufts Street property adjacent to the property boundary with the City of Somerville sidewalk (Fig 11-1). The purpose of the soil sampling was to evaluate concentrations of chlorinated VOCs on the 50 Tufts Street property near the proposed work area for the Tufts Street Reconstruction Project. Borings 50TUFT-B101 and 501TUFT-B102 were advanced in the northern parking lot and borings 50TUFT-B103 through 50TUFT-B105 were advanced in the southern parking lot. Borings were advanced to a depth of five feet and samples were collected for analysis of VOCs.

Boring logs and Laboratory Data Reports were included in the Phase V Status Report No. 26 and RMR No. 41.

12. Remedial Monitoring Report No. 43

Remedial Monitoring Report No. 43, documenting OMM activities for active remedial systems at the Site, is presented in the BWSC-108A and 108B Transmittal Forms in Appendix A.

13. References

MassDEP (1994). "Off-gas Treatment of Point-Source Remedial Air Emissions," Massachusetts Department of Environmental Protection, Policy #WSC-94-150.

MassDEP (2016). "Vapor Intrusion Guidance: Site Assessment, Mitigation and Closure, Policy # WSC-16-435", October 14.

MassDEP (2024). The Massachusetts Contingency Plan (MCP), 310 CMR 40.0000, March 1.

Atlas (2025). "Contained-In Determination, Soil from Tufts Street Right-of-Way Improvements, Somerville, MA, RTN 3-51811," May.

Atlas (2025). "Utility-Related Abatement Measure Notification Report, Tufts Street Improvement Project, Somerville, MA, RTN 3-51811," May.

GEI (2015). "Phase V Status Report No. 8 and Remedial Monitoring Report No. 23, 50 Tufts Street, Somerville, MA, RTN 3-23246," August 3.

GEI (2022). "Release Abatement Measure Plan, 31 Tufts Street, a portion of 50 Tufts Street Disposal Site, Somerville, Massachusetts, RTNs 3-23246 and 3-37468," July 25.

GEI (2023). "Release Abatement Measure Status Report No. 1, 31 Tufts Street, a portion of 50 Tufts Street Disposal Site, Somerville, Massachusetts, RTNs 3-23246 and 3-37468," January 11.

GEI (2023). "Release Abatement Measure Status Report No. 2, 31 Tufts Street, a portion of 50 Tufts Street Disposal Site, Somerville, Massachusetts, RTNs 3-23246 and 3-37468," May 22.

GEI (2023). "Release Abatement Measure Plan, 10 Morton Street, a portion of 50 Tufts Street Disposal Site, Somerville, Massachusetts, RTNs 3-23246," June 21.

GEI (2023). "Release Abatement Measure Plan Modification and Status Report No. 1, 10 Morton Street, a portion of 50 Tufts Street Disposal Site, Somerville, Massachusetts, RTNs 3-23246," November 8.

GEI (2023). "Release Abatement Measure Completion Report and Permanent Solution Statement, 31 Tufts Street, a portion of 50 Tufts Street Disposal Site, Somerville, Massachusetts, RTNs 3-23246 and 3-37468," December 4.

GEI (2024). "Release Abatement Measure Plan, 121 Washington Street, a portion of 50 Tufts Street Disposal Site, Somerville, Massachusetts, RTNs 3-23246," March 12.

GEI (2024). "Release Abatement Measure Status Report No. 2, 10 Morton Street, a portion of 50 Tufts Street Disposal Site, Somerville, Massachusetts, RTNs 3-23246," May 2.

GEI (2024). "Release Abatement Measure Status Report No. 1, 121 Washington Street, a portion of 50 Tufts Street Disposal Site, Somerville, Massachusetts, RTNs 3-23246," July 20.

GEI (2024). "Phase V Status Report No. 26 and Remedial Monitoring Report No. 41, 50 Tufts Street, Somerville, MA, RTN 3-23246," August 7.

GEI (2024). "Release Abatement Measure Status Report No. 3, 10 Morton Street, a portion of 50 Tufts Street Disposal Site, Somerville, Massachusetts, RTNs 3-23246," October 29.

GEI (2025). "Release Abatement Measure Status Report No. 2, 121 Washington Street, a portion of 50 Tufts Street Disposal Site, Somerville, Massachusetts, RTNs 3-23246," January 20.

GEI (2025). "Release Abatement Measure Status Report No. 4, 10 Morton Street, a portion of 50 Tufts Street Disposal Site, Somerville, Massachusetts, RTNs 3-23246," May 28.

GEI (2025). "Partial Permanent Solution Statement for 103 Washington Street, a portion of 50 Tufts Street Disposal Site, Somerville, Massachusetts, RTNs 3-23246," June 12.

Kennedy/Jenks Consultants (2018). "120-Day Release Notification, 132 Washington Street, Somerville, MA," January 23.

TRC (2019). "URAM Plan for Excavation and Dewatering, MBTA Green Line Extension, Somerville, MA, RTN 3-35528," April.

TRC (2019). "Release Abatement Measure Plan, 132 Washington Street, Somerville, MA," July.

TRC (2019). "Release Abatement Measure Modification and Status Report #7, MBTA Green Line Extension Project, Somerville Special Project Designation, Somerville, MA, RTN 3-30620," July 15.

TRC (2019). "Utility-Related Abatement Measure Completion Report, MBTA Green Line Extension, Somerville, MA, RTN 3-35528," August.

TRC (2024). "Release Abatement Measure Completion Report, 132 Washington Street, Somerville, MA," May 7.

Weston & Sampson (2019). "Downgradient Property Status Submittal, 132 Washington Street, Somerville, MA, RTN 3-34742," June.

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Table 5-13 Chemical Testing Results – 17 Knowlton Air Sampling

Table 5-14 Chemical Testing Results – 32 Knowlton Indoor Air Sampling

Table 5-15 Chemical Testing Results – 34 Knowlton Indoor Air Sampling

Table 5-16 Chemical Testing Results – 10 Morton Indoor Air Sampling

Table 5-17 Chemical Testing Results – 11 Morton Indoor Air Sampling

Table 5-18 Chemical Testing Results – 19-19A Morton Indoor Air Sampling

Table 5-19 Chemical Testing Results – 21 Morton Indoor Air Sampling

Table 5-20 Chemical Testing Results – 31 Tufts Indoor Air Sampling

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Table 5-23 Summary of Meteorological Data During Air Sampling Events

Table 6-1 Summary of SSDS Monitoring Events – Capuano Center

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Table 8-1 Summary of SSDS Monitoring Events – 60 Tufts Street

Table 9-1 Summary of SSDS Monitoring Events – 50 Tufts Street

Table 2-1. GLX Excavated Material Summary (RTN 3-34742)
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

RAM Status Report	Date	Cubic Yards	Classification	Disposal Location	Comments		
Status Report No. 1	11/15/2019	11,678.22	Hazardous Waste	Heritage Environmental Services, Roachdale, IN	Stored off-site for > 90 days prior to disposal		
Status Report No. 2	5/15/2020	5,124	Hazardous Waste	Heritage Environmental Services, Roachdale, IN			
Status Report No. 3	11/10/2020	1,576 2,107 1,740	Hazardous Waste Non-Hazardous Non-Hazardous	Heritage Environmental Services, Roachdale, IN Lynn Landfill, Lynn, MA Allied Niagara Fall Landfill, Niagara Falls, NY			
Status Report No. 4	5/10/2021	960.16 408.46	Non-Hazardous Non-Hazardous	Lynn Landfill, Lynn, MA Allied Niagara Fall Landfill, Niagara Falls, NY			
Status Report No. 5	10/27/2021	4,387.18 362.50	Non-Hazardous Non-Hazardous	Lynn Landfill, Lynn, MA Allied Niagara Fall Landfill, Niagara Falls, NY			
Status Report No. 6	5/6/2022	170 21.49 742.24	Hazardous Waste Non-Hazardous Non-Hazardous	Heritage Environmental Services, Roachdale, IN Lynn Landfill, Lynn, MA Allied Niagara Fall Landfill, Niagara Falls, NY	Disposal documents not in RAM Status Report		
Status Report No. 7	10/6/2022	145.31 622.63 519.77	Hazardous Waste Non-Hazardous Non-Hazardous	Heritage Environmental Services, Roachdale, IN Lynn Landfill, Lynn, MA Allied Niagara Fall Landfill, Niagara Falls, NY			
Status Report No. 8	5/15/2023	84.53 17.95 270.97	Non-Hazardous Non-Hazardous Non-Hazardous	Lynn Landfill, Lynn, MA Allied Niagara Fall Landfill, Niagara Falls, NY Winchendon Landfill, in Winchendon, MA			
Status Report No. 9	11/8/2023				No Soil Transported		
RAM Completion Report	5/7/2024				Status Reports Summary Completion Report		
					Tons	CY	CY
			Hazardous Waste	Heritage Environmental Services, Roachdale, IN	18,694	10,996	10,129
			Non-Hazardous	Lynn Landfill, Lynn, MA	8,183	4,814	4,918
			Hazardous Waste	Allied Niagara Fall Landfill, Niagara Falls, NY	3,791	2,230	2,489
			Non-Hazardous	Winchendon Landfill, in Winchendon, MA	271	159	160
Total:					30,938.41	18,199	17,696

General Notes:

1. All volumes are in tons.
2. CID: Contained In Determination
3. 1.7 tons per cubic yard
4. Weight in tons reported according to RTN 3-34742 RAM Status Reports

Table 2-2. GLX Contained-In Determinations (RTN 3-34742)
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

Contained-In Determination Number	Date	Cubic Yards	Description
CID #1	1/6/2020	up to 1,500	Characterize Phase 2 excavations on the west side of ROW
CID #1, Amend #1	3/18/2020	approx. 2,500	Planned Washington Street excavations
CID #1, Amend #2	4/20/2020	approx. 265	Test pits with ROW for drainage structures and stockpiled soil from deep drilled shafts
CID #2	9/11/2020	up to 800	Stockpiled soil generated during deep drainage structures excavation
CID #3	5/26/2021	up to 360	Washington Street pump station utility trench and stockpiled soil generated during pump station utility installations
	7/22/2021		Revision CID #3, noted soil was not "co-mingled".
CID #4	7/23/2021	approx. 340	Stockpiled soil generated during Washington Street pump station utility manhole excavations
CID #5	11/15/2021	approx. 500	Stockpiled soil (~500 cubic yards) generated during the excavation and removal of an Underground Storage Tank (UST) at the Washington Street Pump Station
CID #6	11/15/2021	approx. 20	Stockpiled soil generated from the cleanup of runoff sediment at the Washington Street Pump Station.
CID #7	12/17/2021	approx. 40	Stockpiled soil generated from the clean out of the Washington Street Pump Station House
CID #8	1/20/2022	approx. 400	Stockpiled soil generated during site grading at the Washington Street Pump Station
CID #9	3/3/2022	approx. 120	Stockpiled soil generated during site grading at the Washington Street Pump Station
CID #10	4/21/2022	approx. 60	Stockpiled soil generated during site grading at the Washington Street Pump Station
CID #11	9/8/2022	approx. 80	Stockpiled soil generated during site grading at the Washington Street Pump Station
CID #12	11/17/2022	approx. 260	Stockpiled soil generated from site landscaping at the Washington Street Pump Station
CID #13	10/13/2023	up to 20	Stockpile soil generated during manhole drainage clean outs under the Washington Street Bridge.
CID #14	12/20/2023	up to 20	Stockpile soil generated during manhole drainage clean outs under the Washington Street Bridge.
Total:		7,285.00	

General Notes:

1. CID: Contained-In Determination

Table 2-3. GLX Right of Way Soil Characterization
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

Date	Appendix	Collected by	Documentation
May 2010-April 2014	C-1	Kleinfelder	MBTA
May 2019; October-November 2019	C-2	Unknown	BSC Group, letter of 12/23/2019 to MassDEP
October 2019-April 2020	C-3	TRC	RAM Status Report No. 2, May 15, 2020
April 2020 -August 2020	C-4	TRC	RAM Status Report No. 3, May 15, 2020
November 2020 -February 2021	C-5	TRC	RAM Status Report No. 4, May 10, 2021
April 2021 and June 2021	C-6	TRC	RAM Status Report No. 5, October 27, 2021
October 2021 -January 2022	C-7	TRC	RAM Status Report No. 6, May 6, 2022
March 2022	C-8	TRC	RAM Status Report No. 7, October 6, 2022
July 2022 and November 2022	C-9	TRC	RAM Status Report No. 8, May 15, 2023
September 2023	C-10	TRC	RAM Status Report No. 9, November 8, 2023

General Notes:

1. ROW: Right of Way

Table 4-1. Summary of Groundwater Sampling Activities
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

Sampling Event and Date	Sampled Locations	QA/QC Samples
Quarterly Groundwater Sampling 5/23/2006 5/24/2006 5/25/2006	SH-MW1, SH-MW2, SH-MW3, GEO-1, GEO-2, MW-1, MW-GEO-3, GEO-4, GEO-5, GEO-6, MW101, MW102 MW103, SH-4	NA Field Duplicate of GEO-3 NA
Groundwater Sampling 8/7/2006	MW103	NA
Quarterly Groundwater Sampling 10/4/2006 10/5/2006	SH-MW1, SH-MW2, SH-MW3, GEO-3 GEO-4, GEO-5 and GEO-1, GEO-2, MW101, MW102, MW103, MW104 and	Field Duplicate MW900 (GEO-3) NA
Quarterly Groundwater Sampling 1/16/2007 1/17/2007 1/18/2007	SH-MW1, SH-MW2, GEO-3, GEO-4, GEO-5, GEO-6, SH-MW3, MW-1, MW-3, GEO-1 and GEO-2 MW103, MW106, MW107, MW108, MW109, MW110 and	Field Duplicate MW900 (GEO-6) Field Duplicate MW800 (GEO-1) NA
Groundwater Sampling 2/20/2007 3/23/2007	MW113 and MW114 MW112A, MW115R AND MW116	NA NA
Quarterly Groundwater Sampling 4/12/07 4/13/07 4/16/07 5/23/07	SHMW1, SHMW3, GEO1, GEO2 and MW113 GEO3, MW101, MW102, MW103, MW104, MW106, SHMW2, GEO4, GEO5, GEO6, MW105, MW108, MW109, MWCS1	NA Field Duplicate MW900 (MW101) Field Duplicate MW901 (GEO6) NA
Quarterly Groundwater Sampling 7/18/2007 7/19/2007 7/20/2007	MW102, MW107, MW108, MW11, MW112A, MW113, MW114, MW115R, M2116 and MW117S SHMW2, MW104, MW105, MW106, MW117T, MW117D, MW118S, MW118T and MW118D	Sample from MW102 was used for MS/MSD Field Duplicate MW900 (MW113) Field Duplicate MW901 (MW116) NA NA
Groundwater Sampling 8/22/07 8/30/07	MW119S, MW119T, MW120S and MW120D MW118S, MW118T and MW118D	NA NA
Quarterly Groundwater Sampling 10/10/2007 10/11/2007 10/12/2007 10/15/2007 10/22/2007	MW102, MW105, MW106, MW107, MW108, MW111, MW112A, MW113, MW114, MW115 MW117T, MW117D, MW118S, MW118T, MW118D MW116, MW119S, MW119T, MW120S, MW120D, MW201, MW104, MW117S MW121S, MW121D	Sample from MW102 was used for MS/MSD Field Duplicate MW900 (MW113) NA Field Duplicate MW901 (MW116) NA NA
Quarterly Groundwater Sampling 1/9/2008 1/10/2008 1/11/2008 1/15/2008 1/16/2008 1/17/2008	MW105, MW115 MW102, MW106, MW107, MW108, MW111, MW112A MW104, MW113, MW114, MW116, MW117S, MW118S, MW201, MW202 MW117T, MW117D, MW118T, MW119S, MW120S, MW118D, MW119T MW120D	NA Sample from MW102 was used for MS/MSD Field Duplicate MW900 (MW113) Field Duplicate MW901 (MW116) NA NA NA
Groundwater Sampling 1/30/2008	MW122	NA
Quarterly Groundwater Sampling 4/15/2008 4/16/2008 4/17/2008 4/18/2008	GEO-1, SH-MW3, MW3, MW104, MW113, MW116, MW201, MW202, MW203 MW117S, MW117T, MW117D, MW118T, MW118D, MW102, MW106, MW107, MW108, MW109, MW111, MW112A, MW114, MW115R, MW120D, MW121S, MW105	Field duplicate MW113 (MW900) Field duplicate MW116 (MW901) NA Sample from MW102 was used for MS/MSD NA

Table 4-1. Summary of Groundwater Sampling Activities
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

Sampling Event and Date	Sampled Locations	QA/QC Samples
Quarterly Groundwater Sampling 7/14/2008	MW105, MW112A, MW121S, MW121D, MW122	Field duplicate MW112A (MW900) Field duplicate MW121D (MW901) Sample from MW104 was used for MS/MSD
7/15/2008	GEO-1, GEO-2, MW-3, MW104, MW118S, MW118T, MW118D, MW119S, MW119T, MW120S, MW120D, MW116, MW117S, MW117T, MW117D, MW118D	NA
7/16/2008		
Quarterly Groundwater Sampling 10/21/2008	MW104, GEO-1, GEO-2 MW116, MW117S, MW117T, MW117D, MW118S, MW118T, MW118D, MW202, MW-3	Sample from MW104 was used for MS/MSD
10/22/2008	MW105, MW112A, MW119S, MW119T, MW120S, MW120D, MW121S, MW121D, MW122	Field duplicate MW112A (MW901) Field duplicate MW121D (MW900)
Quarterly Groundwater Sampling 4/15/2008	GEO-1, SH-MW3, MW3, MW104, MW113, MW116, MW201, MW202, MW203	Field duplicate MW113 (MW900) Field duplicate MW116 (MW901) NA
4/16/2008	MW117S, MW117T, MW117D, MW118T, MW118D,	NA
4/17/2008	MW102, MW106, MW107, MW108, MW109, MW111, MW112A, MW114, MW115R, MW120D, MW121S, MW105	Sample from MW102 was used for MS/MSD
4/18/2008		NA
Quarterly Groundwater Sampling 7/14/2008	MW105, MW112A, MW121S, MW121D, MW122	Field duplicate MW112A (MW900) Field duplicate MW121D (MW901) Sample from MW104 was used for MS/MSD
7/15/2008	GEO-1, GEO-2, MW-3, MW104, MW118S, MW118T, MW118D, MW119S, MW119T, MW120S, MW120D, MW116, MW117S, MW117T, MW117D, MW118D	NA
7/16/2008		
Quarterly Groundwater Sampling 10/21/2008	MW104, GEO-1, GEO-2 MW116, MW117S, MW117T, MW117D, MW118S, MW118T, MW118D, MW202, MW-3	Sample from MW104 was used for MS/MSD
10/22/2008	MW105, MW112A, MW119S, MW119T, MW120S, MW120D, MW121S, MW121D, MW122	Field duplicate MW112A (MW901) Field duplicate MW121D (MW900)
Quarterly Groundwater Sampling 1/12/2009	MW105, MW112A, MW121S, MW121D, MW122	Field duplicate MW112A (MW900) Field duplicate MW121D (MW901) NA
1/13/2009	GEO-1, GEO-2, MW117S, MW117T, MW117D, MW119S, MW104, MW-3, MW116, MW118S, MW118T, MW118D	NA
1/14/2009		Sample from MW104 was used for MS/MSD
Quarterly Groundwater Sampling 4/13/2009	GEO-1, GEO-2, MW105, MW112A, MW119S, MW119T, MW121S, MW121D, MW122	Field duplicate MW121D (MW900) Field duplicate MW112A (MW901) NA
4/14/2009	MW-3, MW104, MW117S, MW117T, MW117D, MW118T, MW102, MW116, MW118S	NA
4/15/2009		NA
Quarterly Groundwater Sampling 7/14/2009	MW105, MW112A, MW116, MW118T, MW121S, MW121D, MW202	Field duplicate MW121D (MW900) Field duplicate MW112A (MW901) Sample from MW104 was used for MS/MSD
7/15/2009	GEO-1, GEO-2, MW-3, MW104, MW117S, MW117T, MW117D, MW118S, MW118D, MW119S, MW119T,	
Quarterly Groundwater Sampling 10/14/2009	GEO-1, GEO-2, MW104, MW105, MW112A, MW116, MW117S, MW117D, MW118S, MW118D, MW121S, MW119T, MW119S, MW120S, MW120D, MW118T MW117T, MW3	Field duplicate MW112A (MW900) Field duplicate MW118D (MW901) Sample from MW104 was used for MS/MSD
10/15/2009		
10/16/2009		
Annual Groundwater Sampling 4/12/2010	MW104, MW105, MW112A, MW118S, MW118T, MW118D, MW121S, MW121D, MW122, MW202	Field duplicate MW112A (MW900) Sample from MW104 was used for MS/MSD
4/13/2010	GEO-1, GEO-2, SH-MW3, MW116, MW117S, MW117T, MW117D, MW119S, MW119T, MW120S, MW120D	Field duplicate MW116 (MW901)
Semi-Annual Groundwater Sampling 10/27/2010	MW112A, MW122	NA

Table 4-1. Summary of Groundwater Sampling Activities
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

Sampling Event and Date	Sampled Locations	QA/QC Samples
Annual Groundwater Sampling 4/20/2011 4/21/2011 4/22/2011	MW105, MW112A, MW117D, MW118S, MW118T, GEO-2, SH-MW3, MW104, MW116, MW117S, MW117T GEO-1, MW119S, MW119D, MW120S, MW120D, MW202	Field duplicate MW112A (MW900) Field duplicate MW116 (MW901) Sample from MW104 was used for MS/MSD
Semi-Annual Groundwater Sampling 11/16/2011	MW112A, MW122	NA
Annual Groundwater Sampling 4/16/2012 4/17/2012	SH-MW-3, MW112A, MW117S, MW117T, MW117D, MW118D, MW119S, MW119T, MW120S, MW120D, MW121S, MW121D GEO-1, MW104, MW105, MW116, MW118T, MW122, MW202	Field duplicate MW112A (MW900) Field duplicate MW116 (MW901) Sample from MW104 was used for MS/MSD
Semi-Annual Groundwater Sampling 11/12/2012	MW112A, MW118D, MW121D, MW122	NA
Annual Groundwater Sampling 4/23/2013 4/24/2013 5/1/2013	SH-MW-3, MW105, MW117T, MW119S, MW119T, MW120S, MW120D, MW121S, MW121D, MW122, MW202 GEO-1, MW104, MW112A, MW116, MW117S, MW117D, MW118S, MW118T, MW118D GEO-2	NA Field duplicate MW116 (MW900) Field duplicate MW112A (MW901) Sample from MW104 was used for MS/MSD
Semi-Annual Groundwater Sampling 11/18/2013	MW112A, MW118D, MW121D, MW122	NA
Kleinfelder Groundwater Sampling 2/6/2014 4/8/2014 4/9/2014 4/14/2014 4/15/2014	KE-114-140206, KE-115-140206, KE-116-140206, KE-117-140206, MW-SR-140206, WashSW-140206 KE-202D, KE-202S KE-117 KE-204, KE-206, KE-208 KE-205, KE-207, KE-209, KE-210	Sample from WashSW-140206 was a grab sample from the base of an open excavation. NA NA NA NA
Annual Groundwater Sampling 4/30/2014 5/1/2014 6/11/2014	MW104, MW121S, MW121D, MW122, SH-MW-3, GEO-1, GEO-2 MW117S, MW117T, MW117D, MW118S, MW118D, MW118T, MW119S, MW119T, MW120S, MW120D, MW116 MW112A	Sample from MW104 was used for MS/MSD Field duplicate MW116 (MW900) NA
Semi-Annual Groundwater Sampling 11/18/2014	MW112A, MW118D, MW121D, MW122	NA
Annual Groundwater Sampling 4/2/2015 4/3/2015 4/17/2015	MW104, MW116, MW117S, MW117T, MW117D, MW118S, MW118D, MW119S, MW119T, MW121S, MW121D, MW122, SH-MW-3, GEO-1, GEO-2 MW118T, MW120S, MW120D MW112A	Sample from MW104 was used for MS/MSD Field duplicate MW116 (MW901) Field duplicate MW112A (MW900)
Semi-Annual Groundwater Sampling 11/19/2015	MW118D, MW121D, MW122	NA
Annual Groundwater Sampling 4/28/2016 4/29/2016	MW112A, MW117S, MW117T, MW117D, MW118S, MW118T, MW118D, MW119S, MW119T, MW120S, MW120D, MW121S, MW121D, MW122, GEO-1 MW104, MW116, MW202, GEO-2	Field duplicate MW116 (MW900) Field duplicate GEO-2 (MW901) Sample from MW104 was used for MS/MSD

Table 4-1. Summary of Groundwater Sampling Activities
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

Sampling Event and Date	Sampled Locations	QA/QC Samples
Semi-Annual Groundwater Sampling 11/21/2016	MW112A, MW118D, MW121D, MW122	NA
Annual Groundwater Sampling 4/17/2017	MW104, MW116, MW117S, MW117T, MW117D, MW118S, MW118T, MW118D, MW121S, MW121D, MW122, MW202, GEO-1	Field duplicate MW116 (MW900) Field duplicate MW112A (MW901) Sample from MW104 was used for MS/MSD
4/18/2017	MW112A, MW119S, MW119T, MW120S, MW120D, GEO-2	
4/28/2017	SH-MW-2, MW104	
Semi-Annual Groundwater Sampling 11/8/2017 11/10/2017	MW118D, MW121D, MW122 MW112A	NA
Annual Groundwater Sampling 4/3/2018	MW117S, MW117T, MW117D, MW118S, MW118T, MW118D, MW119S, MW119T, MW121S, MW121D, MW122	Field duplicate MW116 (MW900) Field duplicate GEO-2 (MW901) Sample from MW104 was used for MS/MSD
4/4/2018	GEO-1, GEO-2, MW104, MW112A, MW116, MW120S, MW120D, MW202, SH-MW-2	
Semi-Annual Groundwater Sampling 11/15/2018	MW 112A MW118D, MW121D, MW122	NA
Annual Groundwater Sampling 4/15/2019	MW112A, MW117S, MW117T, MW117D, MW118S, MW118D, MW121S, MW121D, MW122	Field duplicate MW116 (MW900) Field duplicate GEO-2 (MW901) Sample from SHMW2 was used for MS/MSD
4/16/2019	MW116, MW118T, MW119S, MW119T, MW120S, MW120D, MW202, SHMW2, GEO-1, GEO-2	
Semi-Annual Groundwater Sampling 11/23/2019	MW 112A, MW118D, MW121D, MW122	NA
Annual Groundwater Sampling 4/16/2020	MW112A, MW117S, MW117T, MW117D, MW118S, MW118D, MW121S, MW121D, MW122	Field duplicate MW116 (MW900) Field duplicate GEO-2 (MW901) Sample from MW202 was used for MS/MSD
4/17/2020	MW116, MW118T, MW119S, MW119T, MW120S, MW120D, MW202, GEO-1, GEO-2	
Semi-Annual Groundwater Sampling 11/18/2020	MW 112A, MW118D, MW121D, MW122	NA
Annual Groundwater Sampling 4/13/2021	MW112A, MW117S, MW117T, MW117D, MW118S, MW118T, MW118D, MW121S, MW121D, MW122	Field duplicate MW116 (MW900) Field duplicate GEO-2 (MW901) Sample from GEO-1 was used for MS/MSD
4/14/2021	MW116, MW119S, MW119T, MW120S, MW120D, MW202, GEO-1, GEO-2	
Semi-Annual Groundwater Sampling 11/30/2021	MW 112A, MW118D, MW121D, MW122	NA
Annual Groundwater Sampling 4/12/2022	MW118S, MW118T, MW118D, MW117T, MW117S, MW117D	Field duplicate MW116 (MW900) Field duplicate GEO-2 (MW901) Sample from GEO-1 was used for MS/MSD
4/13/2022	MW120S, MW120D, MW119S, MW119T, MW121S, MW121D, GEO-1, MW122, MW202, MW116	
4/14/2022	GEO-2 and MW112A	
Semi-Annual Groundwater Sampling 11/29/2022	MW 112A, MW118D, MW121D, MW122	NA

Table 4-1. Summary of Groundwater Sampling Activities
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

Sampling Event and Date	Sampled Locations	QA/QC Samples
Annual Groundwater Sampling 4/17/2023	MW118S, MW118T, MW118D, MW117T, MW117S, MW117D, MW122, MW119S, MW119T	Field duplicate MW116 (MW900) Field duplicate GEO-2 (MW901) Sample from GEO-1 was used for MS/MSD
4/18/2023	MW120S, MW120D, MW121S, MW121D GEO-1, GEO-2, MW202, MW116	
5/11/2023	MW112A	
Additional Sampling for PSS 9/15/2023	MW108	NA
Semi-Annual Groundwater Sampling 11/7/2023	MW 112A, MW118D, MW121D, MW122	NA
Annual Groundwater Sampling 4/2/2024	MW107, MW112A, MW118D, MW118S, MW118T, MW117D, MW117S, MW117T, MW119S, MW119T, GEO- 1, MW108, MW120S	Field duplicate MW116 (MW900) Field duplicate GEO-2 (MW901) Sample from GEO-1 was used for MS/MSD
4/3/2024	MW102, MW103, MW106, MW116, MW120D, MW121S, MW121D, MW201, MW202, GEO-5, GEO-6, SH-MW2R	
4/4/2024	MW104R, MW109, MW122, GEO-2, GEO-4, MW203R	
Semi-Annual Groundwater Sampling 9/20/2024	MW104R	NA
11/14/2024	MW104R, MW 112A, MW118D, MW121D, MW122	
Site Investigation Sampling 1/20/2025	MW104R, MW301, MW115R	NA
Annual Groundwater Sampling 3/7/2025	MW111R	Field duplicate MW116 (MW900) Field duplicate GEO-2 (MW901) Sample from GEO-1 was used for MS/MSD
3/18/2025	GEO-4, GEO-5	
3/19/2025	MW106, MW109, GEO-6	
4/22/2025	MW107, MW108, MW115R, MW117S, MW117D, MW117T, MW118S, MW118D, MW118T, MW119S, MW119T, MW120S, MW120D	
4/23/2025	MW102, MW103, MW104R, MW121S, MW121D, MW201, MW202, MW301, GEO-1, GEO-2	
4/24/2025	MW111R, MW116, MW122, MW203R, SH-MW2R	
4/25/2025	MW112A	

General Notes:

1. NA = not applicable.
2. QA/QC = quality assurance/quality check.
3. MS/MSD = matrix spike/matrix spike duplicate.
4. VOC = volatile organic compound.
5. All groundwater samples submitted for VOC testing. Selected samples collected in January 2007, April 2010, April 2011, April 2012, April 2013, April 2014, May 2014, June 2014, April 2015, April 2016, April 2017, April 2018, April 2019, April 2020, April 2021, April 2022, April and May 2023, April 2024, and April 2025 were also submitted for natural attenuation parameter testing.

Table 4-2. Chemical Testing Results - GEI Groundwater Sampling
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

Sample Location:					GEO-1	GEO-1	GEO-1	GEO-1	GEO1	GEO1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	GEO-1	G
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**Table 4-2. Chemical Testing Results - GEI Groundwater Sampling
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts**

[illegible]

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes refer to the laboratory data reports.
2. ft bgs = feet below ground surface.
3. µg/l = micrograms per liter.
4. "c" = The analyte was not detected at a concentration above the specified reporting.
5. SHA = Sanborn Head & Associates.
6. FD = Field Duplicate Sample.
7. NT = Not Tested.
8. * = micrograms CaCO₃ per liter

Qualifying Notes:

- B The analyte found in associated method blank.
- C The result has a high bias due to surrogate recovery above upper control limits.
- E The value exceeds the calibration range.
- F The result has a high bias due to matrix spike recovery above upper control limits.
- F- The result has a low bias due to matrix spike recovery below lower control limits.
- G The result is estimated due to duplicate precision outside control limits.
- J The reported result is below the laboratory reporting limit and is estimated.
- J- The reported result is estimated.
- K The result has a low bias due to blank spike or laboratory control sample recovery below lower control limits.
- K+ The result has a high bias due to blank spike or laboratory control sample recovery above upper control limits.
- R The result is rejected due to gross exceedence of minimum response factor criteria.

**Table 4-2. Chemical Testing Results - GEI Groundwater Sampling
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts**

Sample Location: Sample Name: Well Screen Interval (ft bgs): Sample Date: Collected By:					GEO-2	GEO-2	GEO-2	GEO-2	GEO-2	GEO-2	GEO-2	GEO-2	GEO-3	GEO-3	GEO-3	GEO-3	GEO-3	GEO3	GEO-4	GEO-4	GEO-4	GEO-4	GEO-4	GEO-4	GEO-5	GEO-5	GEO-5	GEO-5		
					GEO-2	MW901	GEO-2	MW901	GEO-2	MW901	GEO-2	MW901	GEO-3	GEO-3	MW900 (FD)	GEO-3	MW900 (FD)	GEO-3	GEO3	GEO-4	GEO-4	GEO-4	GEO-4	GEO-4	GEO-4	GEO-4	GEO-5	GEO-5	GEO-5	GEO-5
					5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	4 to 19	4 to 19	4 to 19	4 to 19	4 to 19	4 to 19	4 to 19	5 to 20	5 to 20	5 to 20	5 to 20
					4/14/2022	4/14/2022	4/18/2023	4/18/2023	4/4/2024	4/4/2024	4/23/2025	4/23/2025	8/16/04	5/24/06	5/24/06	10/4/06	10/4/06	1/16/07	4/13/07	8/16/04	5/24/06	10/4/06	1/16/07	4/16/07	4/4/24	3/18/25	8/16/04	5/24/06	10/4/06	1/16/07
Analyte	Method	Units	Method 1 GW 2 Standard	Method 1 GW 3 Standard																										
Volatile Organic Compounds (VOCs)					8260	µg/l																								
Acetone			50000	50000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	< 1000	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 2000	< 5.0	< 5.0	< 100	< 50	<120	<200	< 2000	< 5.0	< 5.0	< 250
Benzene			1000	10000	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.50	<0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 100	< 0.50	< 0.50	< 10	< 5.0	<12	<20	< 100	< 0.50	< 0.50	< 25
Bromodichloromethane			6	50000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 100	< 1.0	< 1.0	< 20	< 10	<25	<40	< 100	< 1.0	< 1.0	< 50
2-Butanone (MEK)			50000	50000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1000	< 5.0	< 5.0	< 100	< 50	<120	<200	< 1000	< 5.0	< 5.0	< 250	
Carbon disulfide			NS	NS	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	< 250	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 100	< 50	<50	<80	< 5.0	< 5.0	< 5.0	< 250	
Carbon tetrachloride			2	5000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 100	< 1.0	< 1.0	< 20	< 10	<25	<40	< 100	< 1.0	< 1.0	< 50
Chlorobenzene			200	1000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 100	< 1.0	< 1.0	< 20	< 10	<25	<40	< 100	< 1.0	< 1.0	< 50
Chloroethane			NS	NS	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	< 100	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 200	< 2.0	< 2.0	< 40	< 20	<50	<80	< 200	< 2.0	< 2.0	< 100
Chloroform			50	20000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 100	< 1.0	2.5	< 20	< 10	<25	<40	< 100	< 1.0		

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes refer to the laboratory data reports.
2. ft bgs = feet below ground surface.
3. µg/l = micrograms per liter.
4. "c" = The analyte was not detected at a concentration above the specified reporting.
5. SHA = Sanborn Head & Associates.
6. FD = Field Duplicate Sample.
7. NT = Not Tested.
8. * = micrograms CaCO₃ per liter

Qualifying Notes:

- B The analyte found in associated method blank.
- C The result has a high bias due to surrogate recovery above upper control limits.
- E The value exceeds the calibration range.
- F The result has a high bias due to matrix spike recovery above upper control limits.
- F- The result has a low bias due to matrix spike recovery below lower control limits.
- G The result is estimated due to duplicate precision outside control limits.
- J The reported result is below the laboratory reporting limit and is estimated.
- J- The reported result is estimated.
- K The result has a low bias due to blank spike or laboratory control sample recovery below lower control limits.
- K+ The result has a high bias due to blank spike or laboratory control sample recovery above upper control limits.
- R The result is rejected due to gross exceedence of minimum response factor criteria.

**Table 4-2. Chemical Testing Results - GEI Groundwater Sampling
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts**

[illegible]

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes refer to the laboratory data reports.
2. ft bgs = feet below ground surface.
3. µg/l = micrograms per liter.
4. "<" = The analyte was not detected at a concentration above the specified reporting.
5. SHA = Sanborn Head & Associates.
6. FD = Field Duplicate Sample.
7. NT = Not Tested.
8. * = micrograms CaCO₃ per liter

Qualifying Notes:

- | | |
|----|--|
| C | The analyte found in associated method blank. |
| C+ | The result has a high bias due to surrogate recovery above upper control limits. |
| E | The value exceeds the calibration range. |
| F+ | The result has a high bias due to matrix spike recovery above upper control limits. |
| F- | The result has a low bias due to matrix spike recovery below lower control limits. |
| G | The result is estimated due to duplicate precision outside control limits. |
| J | The reported result is below the laboratory reporting limit and is estimated. |
| J- | The reported result is estimated. |
| K+ | The result has a low bias due to blank spike or laboratory control sample recovery below lower control limits. |
| K+ | The result has a high bias due to blank spike or laboratory control sample recovery above upper control limits |
| R | The result is rejected due to gross exceedence of minimum response factor criteria. |

**Table 4-2. Chemical Testing Results - GEI Groundwater Sampling
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts**

[illegible]

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes refer to the laboratory data reports.
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Qualifying Notes:

- B The analyte found in associated method blank.
- C The result has a high bias due to surrogate recovery above upper control limits.
- E The value exceeds the calibration range.
- F The result has a high bias due to matrix spike recovery above upper control limits.
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**Table 4-2. Chemical Testing Results - GEI Groundwater Sampling
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts**

Sample Location: Sample Name: Well Screen Interval (ft bgs): Sample Date: Collected By:					MW104	MW104	MW104	MW104	MW104	MW104	MW104R	MW104R	MW104R	MW104R	MW104R	MW105	MW105	MW105	MW105	MW105	MW105	MW105	MW105	MW105	MW105	MW105	MW105	MW105	MW105	MW105	MW105	MW105	MW105			
					MW104	MW104	MW104	MW104	MW104	MW104	MW104R	MW104R	MW104R	MW104R	MW105	MW105	MW105	MW105	MW105	MW105	MW105	MW105	MW105	MW105	MW105	MW105	MW105	MW105	MW105	MW105	MW105	MW105	MW105	MW105	MW105	
					5 to 15	5 to 15	5 to 15	5 to 15	5 to 15	5 to 15	5 to 15	5 to 15	5 to 15	5 to 15	19 to 29	19 to 29	19 to 29	19 to 29	19 to 29	19 to 29	19 to 29	19 to 29	19 to 29	19 to 29	19 to 29	19 to 29	19 to 29	19 to 29	19 to 29	19 to 29	19 to 29	19 to 29	19 to 29	19 to 29	19 to 29	19 to 29
					4/30/14	4/2/15	4/29/16	4/17/17	4/28/17	4/4/18	4/4/24	9/20/24	11/14/24	1/20/25	4/23/25	5/24/06	10/5/06	1/17/07	4/16/07	7/19/07	10/10/07	1/9/08	4/18/08	7/14/08	10/22/08	1/12/09	4/13/09	7/14/09	10/14/09	4/12/10	4/20/11	4/17/12	4/23/13			
Analyte	Method	Units	Method 1 GW 2 Standard	Method 1 GW 3 Standard																																
Volatile Organic Compounds (VOCs)					8260	µg/l			NT																											
Acetone			50000	50000	< 10	< 10	< 10		<10	<10	<50	< 25	< 25	<25	<25	< 5.0	< 5.0	< 5.0	< 5.0	NT	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10				
Benzene			1000	10000	< 0.50	< 0.50	< 0.50		<0.50	<0.50	<5	< 2.5	< 2.5	<2.5	< 0.50	< 0.50	< 0.50	< 0.50	NT	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50				
Bromodichloromethane			6	50000	< 1.0	< 1.0	< 1.0		<1.0	<1.0	<10	< 1.0	< 1.0	<5.0	<5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0				
2-Butanone (MEK)			50000	50000	< 5.0	< 5.0	< 5.0		<10	<10	<50	< 25	< 25	<25	<25	< 5.0	< 5.0	< 5.0	< 5.0	NT	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0				
Carbon disulfide			NS	NS	< 5.0	< 5.0	< 5.0		<2.0	<2.0	<20	< 10	< 10	<10	<10	< 5.0	< 5.0	< 5.0	< 5.0	NT	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0				
Carbon tetrachloride			2	5000	< 1.0	< 1.0	< 1.0		<1.0	<1.0	<10	< 5.0	< 5.0	<5.0	<5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0				
Chlorobenzene			200	1000	< 1.0	< 1.0	< 1.0		<1.0	<1.0	<10	< 5.0	< 5.0	<5.0	<5.0	< 1.0	< 1.0	< 1.0	< 1.0	NT	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0				
Chloroethane			NS	NS	< 2.0	< 2.0	< 2.0		<1.0	<1.0	<20	< 10	< 10	<10	<10	< 2.0	< 2.0</																			

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes refer to the laboratory data reports.
2. ft bgs = feet below ground surface.
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4. "c" = The analyte was not detected at a concentration above the specified reporting.
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8. * = micrograms CaCO₃ per liter

Qualifying Notes:

- B The analyte found in associated method blank.
- C+ The result has a high bias due to surrogate recovery above upper control limits.
- E The value exceeds the calibration range.
- F+ The result has a high bias due to matrix spike recovery above upper control limits.
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- J+ The reported result is estimated.
- K- The result has a low bias due to blank spike or laboratory control sample recovery below lower control limits.
- K+ The result has a high bias due to blank spike or laboratory control sample recovery above upper control limits.
- R The result is rejected due to gross exceedence of minimum response factor criteria.

**Table 4-2. Chemical Testing Results - GEI Groundwater Sampling
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts**

[illegible]

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes refer to the laboratory data reports.
2. ft bgs = feet below ground surface.
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**Table 4-2. Chemical Testing Results - GEI Groundwater Sampling
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts**

[illegible]

General Notes:

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- C+ The result has a high bias due to surrogate recovery above upper control limits.
- E The value exceeds the calibration range.
- F+ The result has a high bias due to matrix spike recovery above upper control limits.
- F- The result has a low bias due to matrix spike recovery below lower control limits.
- G The result is estimated due to duplicate precision outside control limits.
- J The reported result is below the laboratory reporting limit and is estimated.
- J+ The reported result is estimated.
- K- The result has a low bias due to blank spike or laboratory control sample recovery below lower control limits.
- K+ The result has a high bias due to blank spike or laboratory control sample recovery above upper control limits.
- R The result is rejected due to gross exceedence of minimum response factor criteria.

Table 4-2. Chemical Testing Results - GEI Groundwater Sampling
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

Sample Location: Sample Name: Well Screen Interval (ft bgs): Sample Date: Collected By:					MW112A	MW112A	MW112A	MW112A	MW112A	MW112A	MW112A	MW112A	MW112A	MW112A	MW112A	MW112A	MW112A	MW112A	MW112A	MW112A	MW112A	MW112A	MW112A	MW112A	MW112A	MW112A	MW112A	MW112A		
4 to 19 10/14/09 GEI					MW112A	MW900 (FD)	MW112A	MW900 (FD)	MW112A	MW112A	MW900 (FD)	MW112A	MW112A	MW900 (FD)	MW112A	MW112A	MW900 (FD)	MW112A	MW112A	MW900 (FD)	MW112A	MW112A	MW112A	MW901 (FD)	MW112A	MW112A	MW112A	MW112A		
4 to 19 10/14/09 GEI					4 to 19	4 to 19	4 to 19	4 to 19	4 to 19	4 to 19	4 to 19	4 to 19	4 to 19	4 to 19	4 to 19	4 to 19	4 to 19	4 to 19	4 to 19	4 to 19	4 to 19	4 to 19	4 to 19	4 to 19	4 to 19	4 to 19	4 to 19	4 to 19		
Method 1 GW 2 Standard					Method 1 GW 3 Standard					Method 1 GW 3 Standard					Method 1 GW 3 Standard					Method 1 GW 3 Standard					Method 1 GW 3 Standard					
Analyte	Method	Units	Method 1 GW 2 Standard	Method 1 GW 3 Standard																										
Volatile Organic Compounds (VOCs)					8260	µg/l	50000	50000	< 5.0	< 5.0	< 5.0 J+	< 5.0 J+	< 5.0	< 10	< 10	< 5.0	< 5.0 K-	< 5.0 K-	< 10 K-	< 10 K-	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	
Acetone			1000	10000	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 1.0	< 1.0	< 0.50	< 0.50	< 0.50	< 1.0	< 1.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.43 J	0.23 J	0.23 J	< 1.0	< 1.3	
Benzene			6	50000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Bromodichloromethane			50000	50000	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 10	< 10	< 5.0	< 5.0	< 5.0	< 10 K-	< 10	< 10	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 10	< 10	< 10	< 10	< 10	
2-Butanone (MEK)			NS	NS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 10	< 10	< 5.0	< 5.0	< 5.0	< 10	< 10	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	
Carbon disulfide			2	5000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Carbon tetrachloride			200	1000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Chlorobenzene			NS	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 4.0	< 4.0	< 4.0	< 2.0	< 2.0	< 2.0	< 4.0	< 4.0	< 4.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	
Chloroethane			50	20000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Chloroform			NS	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 4.0	< 4.0	< 4.0	< 2.0	< 2.0	< 2.0	< 4.0	< 4.0	< 4.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	
Chloromethane			60	8000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
1,4-Dichlorobenzene			2000	20000	137	142	83.8	88.3	85.5	38.1	38.8	39.5	71.5	69.0	48.1	24.2	37.0	73.5	18.3	64.1 G K-	23.2	25.2	14.1	77	34.1	30.1	88.1	25.3	25.3	38.5
1,2-Dichloroethane			5	20000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
1,1-Dichloroethylene			80	30000	123	130	74.9	78.6	89.1	57.9	53.0	47.6	86.4	76.2	57.3	30.2	30.0	86.5	38.5	109 K+	39	42.9	21.5	132	47.7	43.0	92.5	33.0	33.0	57.3
cis-1,2-Dichloroethylene			20	50000	390	373	165	196	214	143	140	169	178	185	150	145	112	209	150	321	71.1	84.1	108	230	78.2	71.8	155	98.5	98.5	60.6
trans-1,2-Dichloroethylene			90	50000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
1,2-Dichloropropane			3	50000	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 4.0	< 4.0	< 4.0	< 2.0	< 2.0	< 2.0	< 4.0	< 4.0	< 4.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	
1,4-Dioxane			5000	50000	< 25	< 25	< 25	< 25	< 25	< 50	< 50	< 25	< 25	< 25	< 50	< 50	< 50	< 25	< 25	< 25	< 25	< 25	< 25	< 50	< 130	< 130	< 250	< 310	< 310	
Ethylbenzene			20000	5000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
2-Hexanone			NS	NS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 10	< 10	< 5.0	< 5.0	< 5.0	< 10	< 10	< 10	< 5.0 K-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	
4-Isopropyltoluene			NS	NS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 10	< 10	< 5.0	< 5.0	< 5.0	< 10	< 10	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	
Methyl tert-butyl ether			50000	50000	77.5	81.4	15.9	20.3	50.3	9.2	9.1	22.3	27.1	26.2	28.8	19.0	14.1	64.6	4.6	47.3 K+	11.9	13.9	3.9	53.9	11.6	11.4	56	19.1	19.1	25.9
Methylene chloride			2000	50000	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 4.0	< 4.0	< 2.0	< 2.0	< 2.0	< 4.0	< 4.0	< 4.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	
Naphthalene			700	20000	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 10	< 10	< 5.0	< 5.0	< 5.0	< 10	< 10	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	
Tert-amyl methyl ether			NS	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 4.0	< 4.0	< 2.0	< 2.0	< 2.0	< 4.0	< 4.0	< 4.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	
1,1,1,2-Tetrachloroethane			10	50000	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 10	< 10	< 5.0	< 5.0	< 5.0	< 10	< 10	< 10	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Tetrachloroethylene (PCE)			20	30000	393	405	481	477	561	415	409	363	569 R	604	546	339	581	371	266	398	303	300	258	508	435	404	908	317	317	555
Tetrahydrofuran			NS	NS	< 10	< 10	< 10	< 10	< 10	< 20	< 20	< 10	< 10	< 10	< 20	< 20	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	
Toluene			50000	40000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
1,1,1-Trichloroethane (TCA)			4000	20000	4.2 J+	4.4 J+	3.4	3.4	4.3	7.5	< 2.0	3.3	5.3	4.8	4.1	4.3	6.5	8.0	1.5	3.6	1.3	1.4	1.7	6.5	4.1	3.6	11.4	3.6	3.6	5.4
1,1,2-Trichloroethane			900	50000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Trichloroethylene (TCE)			5	5000	194	198.0	173	179	181	110	108	95.0	171	157	138	87.0	140	146	82.0	117	71	73	61.3	220.0	118.0	107	247	92.3	92.3	136
Vinyl chloride			2	50000	1.0	1.5	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	4.4	0.90 J	< 1.0	0.77 J G K	< 1.0	< 1.0	< 1.0	1.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
m,p-Xylene			3000	5000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
o-Xylene			3000	5000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Total Xylene			3000	5000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.														

**Table 4-2. Chemical Testing Results - GEI Groundwater Sampling
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts**

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes refer to the laboratory data reports.
2. ft bgs = feet below ground surface.
3. µg/l = micrograms per liter.
4. "c" = The analyte was not detected at a concentration above the specified reporting.
5. SHA = Sanborn Head & Associates.
6. FD = Field Duplicate Sample.
7. NT = Not Tested.
8. * = micrograms CaCO₃ per liter

Qualifying Notes:

- B The analyte found in associated method blank.
- C The result has a high bias due to surrogate recovery above upper control limits.
- E The value exceeds the calibration range.
- F The result has a high bias due to matrix spike recovery above upper control limits.
- F- The result has a low bias due to matrix spike recovery below lower control limits.
- G The result is estimated due to duplicate precision outside control limits.
- J The reported result is below the laboratory reporting limit and is estimated.
- J- The reported result is estimated.
- K The result has a low bias due to blank spike or laboratory control sample recovery below lower control limits.
- K+ The result has a high bias due to blank spike or laboratory control sample recovery above upper control limits.
- R The result is rejected due to gross exceedence of minimum response factor criteria.

Table 4-2. Chemical Testing Results - GEI Groundwater Sampling
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

Sample Location: Sample Name: Well Screen Interval (ft bgs): Sample Date: Collected By:					MW116	MW116	MW116	MW116	MW116	MW116	MW116	MW116	MW116	MW116	MW116	MW116	MW116	MW116	MW116	MW116	MW116	MW116	MW116	MW116	MW116	MW116	MW116	MW116	MW116		
Sample Name: Well Screen Interval (ft bgs): Sample Date: Collected By:					MW116	MW116	MW116	MW116	MW116	MW901 (FD)	MW116	MW901 (FD)	MW116	MW901 (FD)	MW116	MW901 (FD)	MW116	MW900 (FD)	MW116	MW900 (FD)	MW116	MW900 (FD)	MW116	MW900 (FD)	MW116	MW900 (FD)	MW116	MW900 (FD)	MW116		
Sample Name: Well Screen Interval (ft bgs): Sample Date: Collected By:					5 to 15	5 to 15	5 to 15	5 to 15	5 to 15	5 to 15	5 to 15	5 to 15	5 to 15	5 to 15	5 to 15	5 to 15	5 to 15	5 to 15	5 to 15	5 to 15	5 to 15	5 to 15	5 to 15	5 to 15	5 to 15	5 to 15	5 to 15	5 to 15	5 to 15		
Sample Name: Well Screen Interval (ft bgs): Sample Date: Collected By:					1/14/09	4/15/09	7/14/09	10/14/09	4/13/10	4/13/10	4/21/11	4/21/11	4/17/12	4/17/12	4/24/13	4/24/13	5/1/14	5/1/14	4/2/15	4/2/15	4/29/16	4/29/16	4/17/17	4/17/17	4/4/18	4/4/18	4/16/19	4/16/19	4/17/20		
Sample Name: Well Screen Interval (ft bgs): Sample Date: Collected By:					GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI		
Analyte	Method	Units	Method 1 GW 2 Standard	Method 1 GW 3 Standard																											
Volatile Organic Compounds (VOCs)					8260	µg/l																									
Acetone			50000	50000	< 10	< 5.0	< 10 F+	< 10	< 25	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 20	< 10	< 20	< 20	< 20	< 20	< 20	< 10	< 10	< 10	< 10	< 10	< 10	< 25	< 25	< 12	
Benzene			1000	10000	< 1.0	< 0.50	< 1.0	< 1.0	< 2.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 2.5	< 1.2	
Bromodichloromethane			6	50000	< 2.0	< 1.0	< 2.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 5.0	< 5.0	
2-Butanone (MEK)			50000	50000	< 10	< 5.0	< 10	< 10	< 25	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 25	< 25	< 25	
Carbon disulfide			NS	NS	< 10	< 5.0	< 10	< 10	< 25	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 5.0	
Carbon tetrachloride			2	5000	< 2.0	< 1.0	< 2.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 5.0	< 2.5
Chlorobenzene			200	1000	< 2.0	< 1.0	< 2.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 5.0	< 2.5
Chloroethane			NS	NS	< 4.0	< 2.0	< 4.0	< 4.0	< 10	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 4.0	< 2.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 5.0
Chloroform			50	20000	< 2.0	< 1.0	< 2.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 5.0	< 2.5
Chloromethane			NS	NS	< 4.0	< 2.0	< 4.0	< 4.0	< 10	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 4.0	< 2.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 5.0
1,4-Dichlorobenzene			60	8000	< 2.0	< 1.0 J+	< 2.0 J+	< 2.0	< 5.0	< 1.0	1.6	1.0	0.82 J	0.77 J	< 2.0	< 1.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 5.0	< 2.5
1,1-Dichloroethane			2000	20000	72.5	101	69.7	92.2	63.9	68.9	27.8	23.4	52.8	51.8	31.5	25.8	38.5	41.9	52.0	49.9	38.3	45.0	49.4	49.8	44.1	46.2	22.7	53.9	70	75	39
1,2-Dichloroethane			5	20000	< 2.0	< 1.0	< 2.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 5.0	< 2.5
1,1-Dichloroethylene			80	30000	56.5	70.6	35.2	68.8	49.1	51.9	22.4	14.1	43.3	42.3	26.7	39.4	46.1	50.3	52.4	50.8	27.7	36.4	35.1	34.4	19.7	20.9	9.4	31.3	30	39	27
cis-1,2-Dichloroethylene			20	50000	146	84.1	92.7	133	80.7	92.1	84.6	68.3	115	112	94.8	144	107	116	114	111	50.6	59	67.5	67.2	42.6	27.3	112.0	120	130	110	
trans-1,2-Dichloroethylene			90	50000	< 2.0	< 1.0	< 2.0	< 2.0	< 5.0	1.6	1.6	1.8	< 1.0	< 1.0	< 2.0	1.1	< 2.0	< 2.0	1.1 J	< 2.0	< 1.0	0.42 J	0.45 J	1.1	1.2	< 1.0	< 1.0	< 5.0	< 5.0	< 5.0	
1,2-Dichloropropane			3	50000	< 4.0	< 2.0	< 4.0	< 4.0	< 10	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 4.0	< 2.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 5.0	< 5.0
1,4-Dioxane			5000	50000	< 50	< 25	< 50 F-	< 50	< 130	< 25	< 25	< 25	< 25 K-	< 100	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 130	< 130	< 130	< 130	< 130	< 130	< 130	< 1200	< 1200	< 620
Ethylbenzene			20000	5000	< 2.0	< 1.0	< 2.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 5.0	< 2.5
2-Hexanone			NS	NS	< 10	< 5.0	< 10	< 10	< 25	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 10	< 10	< 10	< 10	< 10	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 25	< 12
4-Isopropyltoluene			NS	NS	< 10	< 5.0 J+	< 10 J+	< 10	< 25	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 10	< 10	< 10	< 10	< 10	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 25	< 12
Methyl tert-butyl ether			50000	50000	9.0	11.7	7.2	8.4	5.4	5.9	4.4	4.4	3.4	3.3	14.1	10.6 K-	4.4	4.8	5.0	4.9	< 2.0	0.79 J	1.6	1.6	1.1	1.2	< 1.0	3.5	< 10	< 10	< 5.0
Methylene chloride			2000	50000	< 4.0	< 2.0	< 4.0	< 4.0	< 10	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 4.0	< 2.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 10	< 10	< 5.0
Naphthalene			700	20000	< 10	< 5.0 J+	< 10 J+	< 10	< 25	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 10	< 10	< 10	< 10	< 10	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 10	< 5.0	
Tert-amyl methyl ether			NS	NS	< 4.0	< 2.0	< 4.0	< 4.0	< 10	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 4.0	< 2.0 K-	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 10	< 10	< 5.0
1,1,1,2-Tetrachloroethane			10	50000	< 10	< 5.0	< 10	< 10	< 25	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 5.0	< 2.5	
Tetrachloroethylene (PCE)			20	30000	795	796 G	1020	1010	860	933	323	166	774	778	527	396	618	670	726	695	450	436	482	456	233	253	129	404	520	550	340
Tetrahydrofuran			NS	NS	< 20	< 10	< 20 F+	< 20	< 50	< 10	< 10	< 10	< 10	< 10	< 20	< 10	13.3 J	15.7 J	< 20	< 20	< 20	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 5.0
Toluene			50000	40000	< 2.0	< 1.0	< 2.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 5.0	< 2.5
1,1,1-Trichloroethane (TCA)			4000	20000	12.8	16.6	8.5	14.3 J+	8.2	10.2	4.2	3.8	8.0	8.3	3.0	6.7	7.3	8.0	7.6	3.8	4.4	3.8	3.7	1.8	2.0	1.0	2.6	< 5.0	< 5.0	< 5.0	2.6
1,1,2-Trichloroethane			900	50000	< 2.0	< 1.0	< 2.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 5.0	< 2.5
Trichloroethylene (TCE)			5	5000	229	341	196	267	195	212	88.7	57.7	181	182	126	95.4	164	182	188	183	113	139	131	129	83.3	86.3	37	157	200	220	120
Vinyl chloride			2	50000	13.9	6.3	6.1	6.9	5.7	6.1	13.5	9.0	8.8 K+	8.8 K+	3.8	< 1.0	1.8 J	2.2	3.8	3.8	< 2.0	< 1.0	1.6	1.4	< 1.0	< 1.0	< 1.0	20.2	22	29	50
m,p-Xylene			3000	5000	< 2.0	< 1.0</																									

**Table 4-2. Chemical Testing Results - GEI Groundwater Sampling
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts**

[illegible]

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes refer to the laboratory data reports.
2. ft bgs = feet below ground surface.
3. µg/l = micrograms per liter.
4. "c" = The analyte was not detected at a concentration above the specified reporting.
5. SHA = Sanborn Head & Associates.
6. FD = Field Duplicate Sample.
7. NT = Not Tested.
8. * = micrograms CaCO₃ per liter

Qualifying Notes:

- B The analyte found in associated method blank.
- C The result has a high bias due to surrogate recovery above upper control limits.
- E The value exceeds the calibration range.
- F The result has a high bias due to matrix spike recovery above upper control limits.
- F- The result has a low bias due to matrix spike recovery below lower control limits.
- G The result is estimated due to duplicate precision outside control limits.
- J The reported result is below the laboratory reporting limit and is estimated.
- J- The reported result is estimated.
- K The result has a low bias due to blank spike or laboratory control sample recovery below lower control limits.
- K+ The result has a high bias due to blank spike or laboratory control sample recovery above upper control limits.
- R The result is rejected due to gross exceedence of minimum response factor criteria.

**Table 4-2. Chemical Testing Results - GEI Groundwater Sampling
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts**

Sample Location:					MW117D	MW117D	MW117D	MW117D	MW117D	MW117D	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW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General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes refer to the laboratory data reports.
2. ft bgs = feet below ground surface.
3. µg/l = micrograms per liter.
4. "c" = The analyte was not detected at a concentration above the specified reporting.
5. SHA = Sanborn Head & Associates.
6. FD = Field Duplicate Sample.
7. NT = Not Tested.
8. * = micrograms CaCO₃ per liter

Qualifying Notes:

- B The analyte found in associated method blank.
- C The result has a high bias due to surrogate recovery above upper control limits.
- E The value exceeds the calibration range.
- F The result has a high bias due to matrix spike recovery above upper control limits.
- F- The result has a low bias due to matrix spike recovery below lower control limits.
- G The result is estimated due to duplicate precision outside control limits.
- J The reported result is below the laboratory reporting limit and is estimated.
- J- The reported result is estimated.
- K The result has a low bias due to blank spike or laboratory control sample recovery below lower control limits.
- K+ The result has a high bias due to blank spike or laboratory control sample recovery above upper control limits.
- R The result is rejected due to gross exceedence of minimum response factor criteria.

Table 4-2. Chemical Testing Results - GEI Groundwater Sampling
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

Sample Location:					MW117S	MW117S	MW117S	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T		
Sample Name:					MW117S	MW117S	MW117S	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T		
Well Screen Interval (ft bgs):					5 to 20	5 to 20	5 to 20	35 to 45	35 to 45	35 to 45	35 to 45	35 to 45	35 to 45	35 to 45	35 to 45	35 to 45	35 to 45	35 to 45	35 to 45	35 to 45	35 to 45	35 to 45	35 to 45	35 to 45	35 to 45	35 to 45	35 to 45	35 to 45	35 to 45	35 to 45	35 to 45		
Sample Date:					4/17/23	4/2/24	4/22/25	7/19/07	10/11/07	1/15/08	4/16/08	7/16/08	10/21/08	1/13/09	4/14/09	7/15/09	10/16/09	4/13/10	4/21/11	4/16/12	4/23/13	5/1/14	4/2/15	4/27/16	4/17/17	4/3/18	4/15/19	4/16/20	4/13/21	4/12/22	4/17/23	4/2/24	4/22/25
Collected By:					GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI
Analyte	Method	Units	Method 1 GW 2 Standard	Method 1 GW 3 Standard																													
Volatile Organic Compounds (VOCs)					8260																												
Acetone		µg/l	50000	50000	<5.0	<5.0	<5.0	NT	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0 J+	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0 K-	< 10	< 10	< 10	< 10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzene			1000	10000	<0.5	<0.5	<0.50	NT	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Bromodichloromethane			6	50000	<1.0	<1.0	<1.0	NT	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2-Butanone (MEK)			50000	50000	<5.0	<5.0	<5.0	NT	< 5.0	< 5.0	< 5.0 J+	< 5.0	< 5.0	< 5.0 J+	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	<10	<10	<10	<10	<10	<10	<10	<10	<10
Carbon disulfide			NS	NS	<2.0	<2.0	<2.0	NT	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Carbon tetrachloride			2	5000	<1.0	<1.0	<1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorobenzene			200	1000	<1.0	<1.0	<1.0	NT	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroethane			NS	NS	<2.0	<2.0	<2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform			50	20000	<1.0	<1.0	<1.0	NT	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloromethane			NS	NS	<2.0	<2.0	<2.0	NT	< 2.0	< 2.0	< 2.0 J+	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,4-Dichlorobenzene			60	8000	<1.0	<1.0	<1.0	NT	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane			2000	20000	<1.0	<1.0	<1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethane			5	20000	<1.0	<1.0	<1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethylene			80	30000	<1.0	<1.0	<1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethylene			20	50000	<1.0	<1.0	<1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethylene			90	50000	<1.0	<1.0	<1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloropropane			3	50000	<1.0	<1.0	<1.0	NT	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,4-Dioxane			5000	50000	<250	<250	<250	NT	< 25	< 25	< 25	< 25	< 25	< 25 J+	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	<130	<130	<130	<250	<250	<250	<250	<250	<250
Ethylbenzene			20000	5000	<1.0	<1.0	<1.0	NT	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2-Hexanone			NS	NS	<5.0	<5.0	<5.0	NT	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
4-Isopropyltoluene			NS	NS	<2.0	<2.0	<2.0	NT	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Methyl tert-butyl ether			50000	50000	<2.0	<2.0	<2.0	NT	3.4	9.8	4.8	1.7	2.8	1.9	4.1	1.5	7.0	1.6	1.4	< 1.0	< 1.0 K-	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methylene chloride			2000	50000	<2.0	<2.0	<2.0	NT	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Naphthalene			700	20000	<2.0	<2.0	<2.0	NT	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0 J+	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Tert-amyl methyl ether			NS	NS	<2.0	<2.0	<2.0	NT	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1,1,2-Tetrachloroethane			10	50000	<1.0	<1.0	<1.0	NT	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Tetrachloroethylene (PCE)			20	30000	<1.0	<1.0	<1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Tetrahydrofuran			NS	NS	<2.0	<2.0	<2.0	NT	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Toluene			50000	40000	<1.0	<1.0	<1.0	NT	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,1-Trichloroethane (TCA)			4000	20000	<1.0	<1.0	<1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane			900																														

**Table 4-2. Chemical Testing Results - GEI Groundwater Sampling
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts**

[illegible]

General Notes:

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3. µg/l = micrograms per liter.
4. "c" = The analyte was not detected at a concentration above the specified reporting.
5. SHA = Sanborn Head & Associates.
6. FD = Field Duplicate Sample.
7. NT = Not Tested.
8. * = micrograms CaCO₃ per liter

Qualifying Notes:

- B The analyte found in associated method blank.
- C The result has a high bias due to surrogate recovery above upper control limits.
- E The value exceeds the calibration range.
- F The result has a high bias due to matrix spike recovery above upper control limits.
- F- The result has a low bias due to matrix spike recovery below lower control limits.
- G The result is estimated due to duplicate precision outside control limits.
- J The reported result is below the laboratory reporting limit and is estimated.
- J- The reported result is estimated.
- K The result has a low bias due to blank spike or laboratory control sample recovery below lower control limits.
- K+ The result has a high bias due to blank spike or laboratory control sample recovery above upper control limits.
- R The result is rejected due to gross exceedence of minimum response factor criteria.

**Table 4-2. Chemical Testing Results - GEI Groundwater Sampling
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts**

Sample Location: Sample Name: Well Screen Interval (ft bgs): Sample Date: Collected By:					MW118D 70 to 80 GEI	MW118D 70 to 80 GEI	MW118D 70 to 80 GEI	MW118D 70 to 80 GEI	MW118D 70 to 80 GEI	MW118D 70 to 80 GEI	MW118D 70 to 80 GEI	MW118D 70 to 80 GEI	MW118D 70 to 80 GEI	MW118D 70 to 80 GEI	MW118D 70 to 80 GEI	MW118D 70 to 80 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI	MW118S 3 to 14 GEI
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50 Tufts Street
Somerville, Massachusetts

Sample Location:					MW118S	MW118S	MW118S	MW118S	MW118S	MW118S	MW118S	MW118S	MW118S	MW118S	MW118S	MW118T	MW118T	MW118T	MW118T	MW118T	MW118T	MW118T	MW118T	MW118T	MW118T	MW118T	MW118T	MW118T		
Sample Name:					MW118S	MW118S	MW118S	MW118S	MW118S	MW118S	MW118S	MW118S	MW118S	MW118S	MW118S	MW118T	MW118T	MW118T	MW118T	MW118T	MW118T	MW118T	MW118T	MW118T	MW118T	MW118T	MW118T	MW118T		
Well Screen Interval (ft bgs):					3 to 14	3 to 14	3 to 14	3 to 14	3 to 14	3 to 14	3 to 14	3 to 14	3 to 14	3 to 14	3 to 14	39.5 to 49.5	39.5 to 49.5	39.5 to 49.5	39.5 to 49.5	39.5 to 49.5	39.5 to 49.5	39.5 to 49.5	39.5 to 49.5	39.5 to 49.5	39.5 to 49.5	39.5 to 49.5	39.5 to 49.5			
Sample Date:					4/2/15	4/28/16	4/17/17	4/3/18	4/15/19	4/16/20	4/13/21	4/12/22	4/17/23	4/2/24	4/22/25	7/20/07	8/30/07	10/11/07	1/15/08	4/16/08	7/15/08	10/21/08	1/14/09	4/14/09	7/14/09	10/15/09	4/12/10	4/20/11	4/17/12	
Collected By:					GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	
Analyte	Method	Units	Method 1 GW 2 Standard	Method 1 GW 3 Standard																										
Volatile Organic Compounds (VOCs)					8260	µg/l																								
Acetone			50000	50000	< 10	< 10	<10	<10	<10	40	<5.0	<5.0	<5.0	<5.0	<5.0	NT	NT	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	
Benzene			1000	10000	< 0.50	< 0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.5	<0.50	NT	NT	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	
Bromodichloromethane			6	50000	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NT	NT	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
2-Butanone (MEK)			50000	50000	< 5.0	< 5.0	<10	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NT	NT	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	
Carbon disulfide			NS	NS	< 5.0	< 5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	NT	NT	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	
Carbon tetrachloride			2	5000	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Chlorobenzene			200	1000	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NT	NT	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Chloroethane			NS	NS	< 2.0	< 2.0	<1.0	<1.0	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	
Chloroform			50	20000	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NT	NT	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Chloromethane			NS	NS	< 2.0	< 2.0	<1.0	<1.0	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	NT	NT	< 2.0	< 2.0	< 2.0 J+	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	
1,4-Dichlorobenzene			60	8000	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NT	NT	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
1,1-Dichloroethane			2000	20000	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	35.4	34.4	44.2	42.3	42.0	41.9	37.0	33.4	33.6	40.0	53.3 J+	37.8	35.9	28.8	
1,2-Dichloroethane			5	20000	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
1,1-Dichloroethylene			80	30000	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
cis-1,2-Dichloroethylene			20	50000	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.45 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
trans-1,2-Dichloroethylene			90	50000	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
1,2-Dichloropropane			3	50000	< 2.0	< 2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NT	NT	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	
1,4-Dioxane			5000	50000	< 25	< 25	<130	<130	<130	<250	<250	<250	<250	<250	<250	NT	NT	< 25	< 25	< 25 J+	< 25	< 25	< 25	< 25 J+	< 25	< 25	< 25	< 25	< 25	< 25
Ethylbenzene			20000	5000	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NT	NT	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
2-Hexanone			NS	NS	< 5.0	< 5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NT	NT	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	
4-Isopropyltoluene			NS	NS	6.0	< 5.0	10.3	<2.0	<2.0	<2.0	3.1	<2.0	<2.0	2.8	11	NT	NT	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Methyl tert-butyl ether			50000	50000	< 1.0	< 1.0	<5.0	<5.0	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	NT	NT	2.4	3.1	2.2	2.5	2.2	2.3	2.0	1.9	7.5	1.2	2.4	1.8	
Methylene chloride			2000	50000	< 2.0	< 2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	NT	NT	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	
Naphthalene			700	20000	< 5.0	< 5.0	<5.0	<5.0	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	NT	NT	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	
Tert-amyl methyl ether			NS	NS	< 2.0	< 2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	NT	NT	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	
1,1,1,2-Tetrachloroethane			10	50000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NT	NT	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	
Tetrachloroethylene (PCE)			20	30000	0.29 J	< 1.0	0.38 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3.0	3.8	2.2	2.9	2.7	2.5	2.4	2.1	2.0	1.7	2.8	1.6	2.1	2.1	
Tetrahydrofuran			NS	NS	< 10	< 10	<10	<10	<10	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	NT	NT	< 10	< 10	< 10 J+	< 10	< 10	< 10	< 10 J+	< 10	< 10	< 10	< 10	< 10	
Toluene			50000	40000	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NT	NT	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
1,1,1-Trichloroethane (TCA)			4000	20000	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
1,1,2-Trichloroethane			900	50000	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Trichloroethylene (TCE)			5	5000	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Vinyl chloride			2	50000	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
m,p-Xylene			3000	5000	< 1.0	< 1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	NT	NT	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
o-Xylene			3000	5000	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NT	NT	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Total Xylene			3000	5000	< 1.0	< 1.0	<1.0	<1.0	<1.0	&																				

Table 4-2. Chemical Testing Results - GEI Groundwater Sampling
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

Sample Location: Sample Name: Well Screen Interval (ft bgs): Sample Date: Collected By:					MW118T	MW118T	MW118T	MW118T	MW118T	MW118T	MW118T	MW118T	MW118T	MW118T	MW118T	MW118T	MW119S	MW119S	MW119S	MW119S	MW119S	MW119S	MW119S	MW119S	MW119S	MW119S	MW119S	MW119S	
Sample Name: Well Screen Interval (ft bgs): Sample Date: Collected By:					MW118T	MW118T	MW118T	MW118T	MW118T	MW118T	MW118T	MW118T	MW118T	MW118T	MW118T	MW118T	MW119S	MW119S	MW119S	MW119S	MW119S	MW119S	MW119S	MW119S	MW119S	MW119S	MW119S	MW119S	
Sample Name: Well Screen Interval (ft bgs): Sample Date: Collected By:					39.5 to 49.5	39.5 to 49.5	39.5 to 49.5	39.5 to 49.5	39.5 to 49.5	39.5 to 49.5	39.5 to 49.5	39.5 to 49.5	39.5 to 49.5	39.5 to 49.5	39.5 to 49.5	39.5 to 49.5	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	
Sample Name: Well Screen Interval (ft bgs): Sample Date: Collected By:					4/24/13	5/1/14	4/3/15	4/28/16	4/17/17	4/3/18	4/16/19	4/17/20	4/13/21	4/12/22	4/17/23	4/2/24	4/22/25	8/22/07	10/12/07	1/15/08	4/16/08	7/15/08	10/22/08	1/13/09	4/13/09	7/15/09	10/15/09	4/13/10	4/22/11
Sample Name: Well Screen Interval (ft bgs): Sample Date: Collected By:					GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	
Analyte	Method	Units	Method 1 GW 2 Standard	Method 1 GW 3 Standard																									
Volatile Organic Compounds (VOCs)					8260	µg/l																							
Acetone			50000	50000	< 10	< 10	< 10	< 10	<10	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 J+	<5.0 J+	<5.0	<5.0	<5.0	<5.0	<5.0 J+	<5.0	<5.0	<5.0	<5.0	<5.0
Benzene			1000	10000	< 0.50	< 0.50	< 0.50	< 0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.5	<0.50	< 0.50 J+	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bromodichloromethane			6	50000	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0 J+	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
2-Butanone (MEK)			50000	50000	< 5.0	< 5.0	< 5.0	< 5.0	<10	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 J+	<5.0 J+	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon disulfide			NS	NS	< 5.0	< 5.0	< 5.0	< 5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<5.0 J+	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon tetrachloride			2	5000	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0 J+	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorobenzene			200	1000	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0 J+	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane			NS	NS	< 2.0	< 2.0	< 2.0	< 2.0	<1.0	<1.0	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	< 2.0 J+	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Chloroform			50	20000	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0 J+	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloromethane			NS	NS	< 2.0	< 2.0	< 2.0	< 2.0	<1.0	<1.0	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	< 2.0 J+	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
1,4-Dichlorobenzene			60	8000	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0 J+	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane			2000	20000	26.9	28.4	31.3	31.3	26.7	22.4	5.8	23	16	1.5	15	9.6	7.3	< 1.0 J+	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane			5	20000	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0 J+	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethylene			80	30000	< 1.0	< 1.0	< 1.0	< 1.0	0.36 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0 J+	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethylene			20	50000	< 1.0	< 1.0	0.45 J	< 1.0	0.55 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0 J+	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,2-Dichloroethylene			90	50000	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0 J+	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane			3	50000	< 2.0	< 2.0	< 2.0	< 2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 2.0 J+	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
1,4-Dioxane			5000	50000	< 50	< 25	< 25	< 25	<130	<130	<130	<250	<250	<250	<250	<250	<250	< 25 J+	< 25	< 25	< 25	< 25	< 25	< 25 J+	< 25	< 25	< 25	< 25	< 25
Ethylbenzene			20000	5000	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0 J+	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
2-Hexanone			NS	NS	< 5.0	< 5.0	< 5.0	< 5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 J+	<5.0 J+	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
4-Isopropyltoluene			NS	NS	< 5.0	< 5.0	< 5.0	< 5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	2.5	<5.0 J+	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl tert-butyl ether			50000	50000	7.1	0.94 J	1.5	1.1	1.9	1.6	<1.0	2.1	<2.0	<2.0	<2.0	<2.0	<2.0	5.2 J+	2.0	2.1	0.83 J	<1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methylene chloride			2000	50000	< 2.0	< 2.0	< 2.0	< 2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	< 2.0 J+	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Naphthalene			700	20000	< 5.0	< 5.0	< 5.0	< 5.0	<5.0	<5.0	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<5.0 J+	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 J+	<5.0	<5.0	<5.0	<5.0
Tert-amyl methyl ether			NS	NS	< 2.0	< 2.0	< 2.0	< 2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	< 2.0 J+	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
1,1,1,2-Tetrachloroethane			10	50000	< 5.0	< 5.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 5.0 J+	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Tetrachloroethylene (PCE)			20	30000	1.5	1.0	1.3	2.0	0.90 J	<1.0	<1.0	1.4	1.1	<1.0	<1.0	<1.0	<1.0	< 1.0 J+	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.5
Tetrahydrofuran			NS	NS	< 10	< 10	< 10	< 10	<10	<10	<10	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	< 10 J+	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Toluene			50000	40000	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0 J+	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane (TCA)			4000	20000	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0 J+	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane			900	50000	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0 J+	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethylene (TCE)			5	5000	< 1.0	< 1.0	0.26 J	0.62 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0 J+	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl chloride			2	50000	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0 J+	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
m,p-Xylene			3000	5000	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	< 1.0 J+	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene			3000	5000	< 1.0	< 1.0	< 1.0	&																					

**Table 4-2. Chemical Testing Results - GEI Groundwater Sampling
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts**

[illegible]

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes refer to the laboratory data reports.
2. ft bgs = feet below ground surface.
3. µg/l = micrograms per liter.
4. "c" = The analyte was not detected at a concentration above the specified reporting.
5. SHA = Sanborn Head & Associates.
6. FD = Field Duplicate Sample.
7. NT = Not Tested.
8. * = micrograms CaCO₃ per liter

Qualifying Notes:

- B The analyte found in associated method blank.
- C The result has a high bias due to surrogate recovery above upper control limits.
- E The value exceeds the calibration range.
- F The result has a high bias due to matrix spike recovery above upper control limits.
- F- The result has a low bias due to matrix spike recovery below lower control limits.
- G The result is estimated due to duplicate precision outside control limits.
- J The reported result is below the laboratory reporting limit and is estimated.
- J- The reported result is estimated.
- K The result has a low bias due to blank spike or laboratory control sample recovery below lower control limits.
- K+ The result has a high bias due to blank spike or laboratory control sample recovery above upper control limits.
- R The result is rejected due to gross exceedence of minimum response factor criteria.

**Table 4-2. Chemical Testing Results - GEI Groundwater Sampling
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts**

Sample Location:					MW120D	MW120D	MW120D	MW120D	MW120D	MW120D	MW120D	MW120D	MW120D	MW120S	MW120S	MW120S	MW120S	MW120S	MW120S	MW120S	MW120S	MW120S	MW120S	MW120S	MW120S	MW120S	MW120S	MW120S	MW120S					
Sample Name:					MW120D	MW120D	MW120D	MW120D	MW120D	MW120D	MW120D	MW120D	MW120D	MW120S	MW120S	MW120S	MW120S	MW120S	MW120S	MW120S	MW120S	MW120S	MW120S	MW120S	MW120S	MW120S	MW120S	MW120S	MW120S					
Well Screen Interval (ft bgs):					28 to 38	28 to 38	28 to 38	28 to 38	28 to 38	28 to 38	28 to 38	28 to 38	28 to 38	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20					
Sample Date:					4/18/17	4/4/18	4/16/19	4/17/20	4/14/21	4/13/22	4/18/23	4/3/24	4/3/24	4/22/25	8/22/07	10/12/07	1/15/08	4/16/08	7/15/08	10/22/08	1/13/09	4/14/09	7/15/09	10/15/09	4/13/10	4/22/11	4/16/12	4/23/13	5/1/14					
Collected By:					GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI					
Analyte	Method	Units	Method 1 GW 2 Standard	Method 1 GW 3 Standard																														
Volatile Organic Compounds (VOCs)					8260	µg/l																												
Acetone			50000	50000	<10	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	< 5.0	< 5.0 J+	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0 J+	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	4.2 J K-	< 10	< 10	< 10	9.3 J	<10	<10
Benzene			1000	10000	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	<0.50	<0.50	
Bromodichloromethane			6	50000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0		
2-Butanone (MEK)			50000	50000	<10	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	< 5.0	< 5.0 J+	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	<10	<10	
Carbon disulfide			NS	NS	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	0.56 J J+	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	<2.0	<2.0	
Carbon tetrachloride			2	5000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0		
Chlorobenzene			200	1000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0		
Chloroethane			NS	NS	<1.0	<1.0	<1.0	<2.0	<2.0</																									

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes refer to the laboratory data reports.
2. ft bgs = feet below ground surface.
3. µg/l = micrograms per liter.
4. "c" = The analyte was not detected at a concentration above the specified reporting.
5. SHA = Sanborn Head & Associates.
6. FD = Field Duplicate Sample.
7. NT = Not Tested.
8. * = micrograms CaCO₃ per liter

Qualifying Notes:

- B The analyte found in associated method blank.
- C The result has a high bias due to surrogate recovery above upper control limits.
- E The value exceeds the calibration range.
- F The result has a high bias due to matrix spike recovery above upper control limits.
- F- The result has a low bias due to matrix spike recovery below lower control limits.
- G The result is estimated due to duplicate precision outside control limits.
- J The reported result is below the laboratory reporting limit and is estimated.
- J- The reported result is estimated.
- K The result has a low bias due to blank spike or laboratory control sample recovery below lower control limits.
- K+ The result has a high bias due to blank spike or laboratory control sample recovery above upper control limits.
- R The result is rejected due to gross exceedence of minimum response factor criteria.

Table 4-2. Chemical Testing Results - GEI Groundwater Sampling
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

Sample Location:					MW120S	MW120S	MW120S	MW120S	MW120S	MW120S	MW120S	MW120S	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D
Sample Name:					MW120S	MW120S	MW120S	MW120S	MW120S	MW120S	MW120S	MW120S	MW121D	MW121D	MW121D	MW121D	MW901	MW121D	MW900 (FD)	MW121D	MW901 (FD)	MW121D	MW900 (FD)	MW121D	MW900 (FD)	MW121D	MW900 (FD)	MW121D
Well Screen Interval (ft bgs):					5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	
Sample Date:					4/16/19	4/17/20	4/14/21	4/13/22	4/18/23	4/2/24	4/22/25	10/22/07	1/15/08	4/17/08	7/14/08	7/14/08	10/22/08	10/22/08	10/22/08	1/12/09	1/12/09	1/12/09	4/13/09	4/13/09	7/14/09	7/14/09	10/14/09	4/12/10
Collected By:					GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI
Analyte	Method	Units	Method 1 GW 2 Standard	Method 1 GW 3 Standard																								
Volatile Organic Compounds (VOCs)					8260	µg/l																						
Acetone			50000	50000	<10	5.3	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Benzene			1000	10000	<0.50	<0.50	<0.5	<0.5	<0.5	<0.5	<0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bromodichloromethane			6	50000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	3.3
2-Butanone (MEK)			50000	50000	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Carbon disulfide			NS	NS	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Carbon tetrachloride			2	5000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorobenzene			200	1000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane			NS	NS	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Chloroform			50	20000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloromethane			NS	NS	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
1,4-Dichlorobenzene			60	8000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane			2000	20000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	46.3	55.3	46.6	37.2	38.1	36.1	34.2	38.2	38.3	37.2	38.1	37.6	37.9	54.8	52.9	65.8	67.7
1,2-Dichloroethane			5	20000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethylene			80	30000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	13.2	< 1.0	16.7	12.8	12.6	12.9 G	8.4 G	14.0	14.2	14.1	14.2	11.0	10.4	21.8	18.0	24.1	25.5
cis-1,2-Dichloroethylene			20	50000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3.9	11.8	6.4	21.8	22.6	83.7 G	41.2 G	134	138	80.0	78.4	105	106	253	279	217	178
trans-1,2-Dichloroethylene			90	50000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0	0.70 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	5.8	< 1.0
1,2-Dichloropropane			3	50000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
1,4-Dioxane			5000	50000	<130	<250	<250	<250	<250	<250	<250	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25
Ethylbenzene			20000	5000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
2-Hexanone			NS	NS	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
4-Isopropyltoluene			NS	NS	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Methyl tert-butyl ether			50000	50000	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	3.0	3.8	2.4	2.1	2.0	5.6	5.6	1.8	1.8	1.7	1.9	1.4	1.4	< 1.0	0.94 J	2.0	1.7
Methylene chloride			2000	50000	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Naphthalene			700	20000	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Tert-amyl methyl ether			NS	NS	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
1,1,1,2-Tetrachloroethane			10	50000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Tetrachloroethylene (PCE)			20	30000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	182	258	177	157	154	148 G	97.7 G	112	114	121	118	140	139	115	119	219	356
Tetrahydrofuran			NS	NS	<10	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Toluene			50000	40000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.51 J	1.6	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane (TCA)			4000	20000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.2	1.3	1.1	1.0	4.9	4.6	0.87 J	0.86 J	1.0	< 1.0	0.95 J	1.0	< 1.0	0.62 J	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane			900	50000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethylene (TCE)			5	5000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	59.6	136	68.8	71.0	72.0	48.3 G	69.0 G	36.5	36.3	62.3	70.7	76.3	76.5	146.0	96.3	233.0	342
Vinyl chloride			2	50000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.39 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	0.32 J	0.31 J	< 1.0	< 1.0	0.56 J	0.52 J	< 1.0	< 1.0	7.4	15.2
m,p-Xylene			3000	5000	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene			3000	5000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Xylene			3000	5000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Metals (Total)					6010B	µg/l																						

Table 4-2. Chemical Testing Results - GEI Groundwater Sampling
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

Sample Location: Sample Name: Well Screen Interval (ft bgs): Sample Date: Collected By:					MW121D 32.1 to 47.1 11/12/12 GEI	MW121D 32.1 to 47.1 4/23/13 GEI	MW121D 32.1 to 47.1 11/18/13 GEI	MW121D 32.1 to 47.1 4/30/14 GEI	MW121D 32.1 to 47.1 11/18/14 GEI	MW121D 32.1 to 47.1 4/2/15 GEI	MW121D 32.1 to 47.1 11/19/15 GEI	MW121D 32.1 to 47.1 4/28/16 GEI	MW121D 32.1 to 47.1 11/21/16 GEI	MW121D 32.1 to 47.1 4/17/17 GEI	MW121D 32.1 to 47.1 11/8/17 GEI	MW121D 32.1 to 47.1 4/3/18 GEI	MW121D 32.1 to 47.1 11/15/18 GEI	MW121D 32.1 to 47.1 4/15/19 GEI	MW121D 32.1 to 47.1 11/22/19 GEI	MW121D 32.1 to 47.1 4/16/20 GEI	MW121D 32.1 to 47.1 11/18/20 GEI	MW121D 32.1 to 47.1 4/13/21 GEI	MW121D 32.1 to 47.1 11/30/21 GEI	MW121D 32.1 to 47.1 4/13/22 GEI	MW121D 32.1 to 47.1 11/29/22 GEI	MW121D 32.1 to 47.1 4/18/23 GEI	
Analyte	Method	Units	Method 1 GW 2 Standard	Method 1 GW 3 Standard																							
Volatile Organic Compounds (VOCs)																											
Acetone	8260	µg/l	50000	50000	< 5.0 K-	< 10	< 10 K-	< 10	< 10	< 10	< 10	8.7 J	< 10	< 10	< 10	< 10	< 10	< 10	< 10	<5.0	<5.0	<5.0	<5.0	<5.0	<5	<5	
Benzene			1000	10000	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.5	<0.5	
Bromodichloromethane			6	50000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<1	
2-Butanone (MEK)			50000	50000	< 5.0 K-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10	<5.0	<5.0	<5.0	<5.0	<5.0	<5	<5	
Carbon disulfide			NS	NS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2	<2	
Carbon tetrachloride			2	5000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<1	
Chlorobenzene			200	1000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<1	
Chloroethane			NS	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0 G	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2	<2	
Chloroform			50	20000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<1	
Chloromethane			NS	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0 G	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2	<2	
1,4-Dichlorobenzene			60	8000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<1	
1,1-Dichloroethane			2000	20000	49.9	63.4	32.1	45.0	149.0	55.7	35.9	40.2	109.0	32.0	47.6	14.8	14.0	18.8	18.0	16	12	18	18	18	38	24	
1,2-Dichloroethane			5	20000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<1	
1,1-Dichloroethylene			80	30000	17.6	22.3	12.7	17.6	59.7 K+	23.5	14.5	14.9	35.9	14.8	15.3	7.6	7.0	7.7	8.7	8.6	8.0	7.5	6.3	2.3	7.3	5.5	
cis-1,2-Dichloroethylene			20	50000	122	193	67.2	133	316	186	73.6	108	271	79.9	119	24.8	44.3	73.5	85.4	20	26	37	18	33	11	17	
trans-1,2-Dichloroethylene			90	50000	< 1.0	2.9	< 1.0	1.5	0.57 J K+	<1.0	<1.0	<1.0	1.1	0.37 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<1	
1,2-Dichloropropane			3	50000	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<1	
1,4-Dioxane			5000	50000	< 25	< 50	< 50	< 25 K-	< 25 K-	< 25	< 25	< 25	< 50	< 130	< 130	< 130	< 130	< 130	< 130	<250	<250	<250	<250	<250	<250	<250	
Ethylbenzene			20000	5000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<1	
2-Hexanone			NS	NS	< 5.0	< 5.0	< 5.0 K-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5	<5	
4-Isopropyltoluene			NS	NS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0	< 1.0	< 2.0	< 2.0	< 2.0	< 2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2	<2	
Methyl tert-butyl ether			50000	50000	2.1	8.6 K-	2.7	2.3	7.1 K+	2.1	1.6	0.72 J	1.7	1.4	1.4	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	3.3	3.3	
Methylene chloride			2000	50000	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2	<2	
Naphthalene			700	20000	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2	<2	
Tert-amyl methyl ether			NS	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2	<2	
1,1,1,2-Tetrachloroethane			10	50000	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	<1.0	<1.0	<1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<1	
Tetrachloroethylene (PCE)			20	30000	223	276	124	163	224	216	216	227	139	160	242	78	47.5	48.2	64.8	87	58	72	52	1.9	54	35	
Tetrahydrofuran			NS	NS	< 10 F- K-	< 10	< 10	< 10 G	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	<2.0	<2.0	<2.0	<2.0	<2.0	<2	<2	
Toluene			50000	40000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<1	
1,1,1-Trichloroethane (TCA)			4000	20000	< 1.0	< 1.0	< 1.0	0.53 J	0.44 J	1.4	0.56 J	1.1	< 1.0	0.45 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<1	
1,1,2-Trichloroethane			900	50000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<1	
Trichloroethylene (TCE)			5	5000	207	342	115	236	432	266	148	262	176	159	310	39.7	23.5	31.1	40.0	34	22	40	27	5	32.0	20.0	
Vinyl chloride			2	50000	8.5	10.2	3.4	9.5	38.4 G K-	15	7.5	18.2	23.3	6.6	10.4	<1.0	6.1	9	4.5	<1.0	2.0	1.5	1.0	31.0	3.0	8.6	
m,p-Xylene			3000	5000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2	<2	
o-Xylene			3000	5000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<1	
Total Xylene			3000	5000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<1	
Metals (Total)					NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
Arsenic	6010B	µg/l	NS	900																							
Iron			NS	NS																							
Manganese			NS	NS																							
Metals (Dissolved)					NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
Iron	6010C	µg/l	NS	NS																							
Others					NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
Methane	8015	µg/l	NS	NS																							
Ethane	8015	µg/l	NS	NS																							
Ethylene	8015	µg/l	NS	NS																							
Alkalinity	E310.1	µg/l*	NS	NS																							
Chloride	E325.3	µg/l	NS	NS																							
Iron, Ferrous	3500FE B	µg/l	NS	NS	</																						

**Table 4-2. Chemical Testing Results - GEI Groundwater Sampling
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts**

[illegible]

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes refer to the laboratory data reports.
2. ft bgs = feet below ground surface.
3. µg/l = micrograms per liter.
4. "<" = The analyte was not detected at a concentration above the specified reporting.
5. SHA = Sanborn Head & Associates.
6. FD = Field Duplicate Sample.
7. NT = Not Tested.
8. * = micrograms CaCO3 per liter

Qualifying Notes:

- C+ The analyte found in associated method blank.
- B- The result has a high bias due to surrogate recovery above upper control limits.
- E The value exceeds the calibration range.
- F+ The result has a high bias due to matrix spike recovery above upper control limits.
- G- The result has a low bias due to matrix spike recovery below lower control limits.
- G The result is estimated due to duplicate precision outside control limits.
- J The reported result is below the laboratory reporting limit and is estimated.
- J- The reported result is estimated.
- K- The result has a low bias due to blank spike or laboratory control sample recovery below lower control limits.
- K+ The result has a high bias due to blank spike or laboratory control sample recovery above upper control limits.
- R The result is rejected due to gross exceedence of minimum response factor criteria.

Table 4-2. Chemical Testing Results - GEI Groundwater Sampling
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

Sample Location: MW121S				MW121S	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122		
Sample Name: MW121S				MW121S	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122			
Well Screen Interval (ft bgs): 5 to 20				MW121S	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122			
Sample Date: 4/23/25				MW121S	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122			
Collected By: GEI				MW121S	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122	MW122			
Analyte	Method	Units	Method 1 GW 2 Standard	Method 1 GW 3 Standard																													
Volatile Organic Compounds (VOCs)				8260	µg/l																												
Acetone			50000	50000	<5.0	< 5.0 J+	9.6 J	11.1	7.2	5.7	< 5.0	< 5.0 F-	< 10	3.8 J+	< 5.0	17.8	< 5.0	< 5.0	< 25 K-	< 50	< 50 K-	< 20	< 20	< 20	< 10	9.4 J	< 40	< 50	< 10	< 50	< 50	< 20	< 50
Benzene			1000	10000	<0.50	< 0.50	< 1.0	0.46 J	< 0.50	< 0.50	< 0.50	0.23 J	< 1.0	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 2.5	< 2.5	< 2.5	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 2.0	< 2.5	< 0.50	< 2.5	< 2.5	< 1.0	< 2.5
Bromodichloromethane			6	50000	<1.0	< 1.0	1.1 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 5.0	< 5.0	< 5.0	< 2.0	< 2.0	< 2.0	< 1.0	< 4.0	< 5.0	< 1.0	< 5.0	< 5.0	< 2.0	< 5.0	
2-Butanone (MEK)			50000	50000	<5.0	< 5.0 J+	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 25 K-	< 25	< 25	< 10	< 10	< 10	17.3 J	< 10	< 40	< 50	< 10	< 50	< 20	< 50	
Carbon disulfide			NS	NS	<2.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0 F-	< 10	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 25	< 25	< 25	< 10	< 10	< 10	< 10	< 5.0	< 20	< 10	< 20	< 10	< 4.0	< 10	
Carbon tetrachloride			2	5000	<1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 5.0	< 5.0	< 5.0	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 4.0	< 5.0	< 1.0	< 5.0	< 2.0	< 5.0	
Chlorobenzene			200	1000	<1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 5.0	< 5.0	< 5.0	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 4.0	< 5.0	< 1.0	< 5.0	< 2.0	< 5.0	
Chloroethane			NS	NS	<2.0	< 2.0	< 4.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0 F-	< 4.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 10	< 10	< 10	< 4.0	< 4.0	< 4.0	< 2.0	< 8.0	< 5.0	< 1.0	< 5.0	< 2.0	< 5.0		
Chloroform			50	20000	<1.0	< 1.0	< 2.0	< 1.0	0.61 J	< 1.0	< 1.0	< 1.0	0.75 J	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 5.0	< 5.0	< 5.0	< 2.0	< 2.0	< 2.0	< 1.0	< 4.0	< 5.0	< 1.0	< 5.0	< 2.0	< 5.0		
Chloromethane			NS	NS	<2.0	< 2.0	< 4.0	< 2.0	< 2.0 J+	< 2.0	< 2.0	< 2.0 F-	< 4.0	< 2.0	< 2.0	< 4.0	< 2.0	< 2.0	< 10	< 10	< 10	< 4.0	< 4.0	< 4.0	< 2.0	< 8.0	< 5.0	< 1.0	< 5.0	< 2.0	< 5.0		
1,4-Dichlorobenzene			60	8000	<1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 5.0	< 5.0	< 5.0	< 2.0	< 2.0	< 2.0	< 2.0	< 4.0	< 5.0	< 1.0	< 5.0	< 2.0	< 5.0		
1,1-Dichloroethane			2000	20000	<1.0	19.3	30.4 C+	10.1	15.0	16.0	25.8	21.2	20.8	29.6	20.3	19.1	15.2	17.2	14.4	11.1	12.7	15.9	12.8	15.0	6.8	18.3	20.5	30.9	14.8	22.7	17.0	18.8	
1,2-Dichloroethane			5	20000	<1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 5.0	< 5.0	< 5.0	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 4.0	< 5.0	< 1.0	< 5.0	< 2.0	< 5.0	
1,1-Dichloroethylene			80	30000	<1.0	4.0	9.0 C+	1.4	4.4	3.4	6.1	5.3 F-	6.6	7.3	4.6	8.3	4.1	6.4	4.7 J	4.1 J	4.4 J	5.1	3.8 K+	4.5	1.6 J	5.8	5.6	7.7	3.9	8.1	7.3	6.1	
cis-1,2-Dichloroethylene			20	50000	<1.0	60.6	70.7 C+	34.0	62.5	91.5	61.9	39.4	109.0	58.6	117	45.5	66.4	61.5	84.7	56.2	67.2	68.0	69.3	43.8	75.7	61.3	68.5	67.2	50	64.4	71.0	69.1	
trans-1,2-Dichloroethylene			90	50000	<1.0	0.87 J	< 2.0	< 1.0	< 1.0	< 1.0	0.93 J	< 1.0	< 2.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 5.0	< 5.0	< 5.0	< 2.0	< 2.0 K+	< 2.0	< 2.0	< 1.0	< 4.0	< 5.0	< 1.0	< 5.0	< 2.0	< 5.0	
1,2-Dichloropropane			3	50000	<1.0	< 2.0	< 4.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 4.0	< 2.0	< 2.0	< 4.0	< 2.0	< 2.0	< 10	< 10	< 10	< 4.0	< 4.0	< 4.0	< 4.0	< 2.0	< 8.0	< 5.0	< 1.0	< 5.0	< 2.0	< 5.0	
1,4-Dioxane			5000	50000	<250	< 25	< 50	< 25	< 25	< 25	< 25	< 25	< 50	< 25	< 25	< 50	< 25	< 25	< 25 K-	< 130	< 260	< 260	< 50 K-	< 50	< 50	< 200	< 630	< 130	< 630	< 250	< 630		
Ethylbenzene			20000	5000	<1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 5.0	< 5.0	< 5.0	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 4.0	< 5.0	< 1.0	< 5.0	< 2.0	< 5.0	
2-Hexanone			NS	NS	<5.0	< 5.0 J+	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 25	< 25	< 25 K-	< 10	< 10	< 10	< 10	< 40	< 25	< 5.0	< 25	< 2.0	< 25		
4-Isopropyltoluene			NS	NS	<2.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 25	< 25	< 25	< 10	< 10	< 10	< 10	< 20	< 10	< 2.0	< 10	< 4.0	< 10		
Methyl tert-butyl ether			50000	50000	<2.0	3.3	3.9 C+	1.9	5.6	2.5	3.2	3.3	2.9	2.3	2.7	2.9	2.1	2.7	2.2 J	< 5.0 K-	< 5.0	1.5 J	2.6 K+	1.8	1.0 J	1.2	< 4.0	3.7	1.1	< 5.0	< 5.0	2.1	
Methylene chloride			2000	50000	<2.0	< 2.0	< 4.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 4.0	< 2.0	< 2.0	< 4.0	< 2.0	< 2.0	< 10	< 10	< 10	< 4.0	< 4.0	< 4.0	1.1 J	< 2.0	39.4	< 10	< 2.0	< 10	< 4.0		
Naphthalene			700	20000	<2.0	< 5.0	< 10	2.6 J	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 25	< 25	< 25	< 10	< 10	< 10	< 5.0	< 20	< 25	< 5.0	< 25	< 10	< 25		
Tert-amyl methyl ether			NS	NS	<2.0	< 2.0	< 4.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 4.0	< 2.0	< 2.0	< 4.0	< 2.0	< 10	< 10	< 10	< 4.0	< 4.0	< 4.0	< 4.0	< 2.0	< 8.0	< 10	< 2.0	< 10	< 4.0	< 10		
1,1,1,2-Tetrachloroethane			10	50000	<1.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 25	< 25	< 25	< 10	< 10	< 2.0	< 2.0	< 1.0	< 4.0	< 5.0	< 1.0	< 5.0	< 2.0	< 5.0	
Tetrachloroethylene (PCE)			20	30000	<1.0	477	691 C+	122	352 G	312	499 G	677	518	856	532	656	581	1000	811	938	726	592	499	784	326	734	684	910	579	959	1150	1060	
Tetrahydrofuran			NS	NS	<2.0	< 10	< 20	< 10	< 10	< 10	< 10	< 10	< 20	< 10	< 10	< 20	< 10	< 10	< 50 F- K-	< 50	< 50	< 20 G	< 20	< 20	< 20	< 10	< 40	< 50	< 10	< 50	< 2.0	< 50	
Toluene			50000	40000	<1.0	0.48 J	< 2.0	2.8	3.7	0.64 J	2.4	1.6	< 4.0	6.0	< 1.0	< 2.0	< 1.0	< 1.0	< 5.0	< 5.0	6	< 2.0	0.79 J	0.72	< 2.0	< 1.0	< 4.0	< 5.0	20.7	< 5.0	< 2.0	< 5.0	
1,1,1-Trichloroethane (TCA)			4000	20000	<1.0	1.4	3.4 C+	0.63 J	5.1	1.1	1.7	1.7	< 2.0	1.5	< 1.0	7.5	1.4	2.2	< 5.0	< 5.0	< 5.0	< 2.0	< 2.0	2.0	< 2.0	0.92 J	< 4.0	< 5.0	< 1.0	< 5.0	< 2.0	< 5.0	
1,1,2-Trichloroethane			900	50000	<1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 5.0	< 5.0	< 5.0	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 4.0	< 5.0	< 1.0	< 5.0	< 2.0	< 5.0	
Trichloroethylene (TCE)			5	5000	<1.0	177	106 C+	27.0	56.9	59.6	91.7	90.2	81.1	119.0	82.1	73.1	79.0	103	88.0	93.4	76.0	98.9	58.9	82.9	44.9	98.3	87.1	102.0	63.3	110.0	122	121	
Vinyl chloride			2	50000	<1.0																												

**Table 4-2. Chemical Testing Results - GEI Groundwater Sampling
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts**

[illegible]

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes refer to the laboratory data reports.
2. ft bgs = feet below ground surface.
3. µg/l = micrograms per liter.
4. "c" = The analyte was not detected at a concentration above the specified reporting.
5. SHA = Sanborn Head & Associates.
6. FD = Field Duplicate Sample.
7. NT = Not Tested.
8. * = micrograms CaCO₃ per liter

Qualifying Notes:

- B The analyte found in associated method blank.
- C The result has a high bias due to surrogate recovery above upper control limits.
- E The value exceeds the calibration range.
- F The result has a high bias due to matrix spike recovery above upper control limits.
- F- The result has a low bias due to matrix spike recovery below lower control limits.
- G The result is estimated due to duplicate precision outside control limits.
- J The reported result is below the laboratory reporting limit and is estimated.
- J- The reported result is estimated.
- K The result has a low bias due to blank spike or laboratory control sample recovery below lower control limits.
- K+ The result has a high bias due to blank spike or laboratory control sample recovery above upper control limits.
- R The result is rejected due to gross exceedence of minimum response factor criteria.

**Table 4-2. Chemical Testing Results - GEI Groundwater Sampling
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts**

Sample Location: Sample Name: Well Screen Interval (ft bgs): Sample Date: Collected By:					MW202	MW202	MW202	MW202	MW202	MW202	MW202	MW202	MW202	MW202	MW202	MW202	MW202	MW202	MW202	MW202	MW202	MW202	MW203	MW203	MW203R	MW203R	MW-3	MW-3			
					MW202	MW202	MW202	MW202	MW202	MW202	MW202	MW202	MW202	MW202	MW202	MW202	MW202	MW202	MW202	MW202	MW202	MW202	MW202	MW202	MW202	MW203	MW203	MW203R	MW203R	MW-3	MW-3
					10.5 to 20.5	10.5 to 20.5	10.5 to 20.5	10.5 to 20.5	10.5 to 20.5	10.5 to 20.5	10.5 to 20.5	10.5 to 20.5	10.5 to 20.5	10.5 to 20.5	10.5 to 20.5	10.5 to 20.5	10.5 to 20.5	10.5 to 20.5	10.5 to 20.5	10.5 to 20.5	10.5 to 20.5	10.5 to 20.5	10.5 to 20.5	10.5 to 20.5	10.5 to 20.5	6 to 18	6 to 18	13 to 23	13 to 23	Unknown	Unknown
					7/14/09	10/14/09	4/12/10	4/22/11	4/17/12	4/23/13	5/1/14	4/2/15	4/29/16	4/17/17	4/4/18	4/23/16	4/17/20	4/14/21	4/13/22	4/18/23	4/3/24	4/23/25	7/19/07	4/15/08	4/4/24	4/24/25	7/1/02	8/9/04			
Analyte	Method	Units	Method 1 GW 2 Standard	Method 1 GW 3 Standard																											
Volatile Organic Compounds (VOCs)					8260	µg/l																									
Acetone			50000	50000	< 5.0	< 5.0	< 5.0 J+	< 5.0	< 5.0	< 10	< 10	< 10	9.7	<10	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NT	< 250	<250	<250	< 2500	< 2000			
Benzene			1000	10000	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NT	< 25	<25	<25	< 250	< 100			
Bromodichloromethane			6	50000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NT	< 50	<5.00	<50	< 250	< 100				
2-Butanone (MEK)			50000	50000	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	<10	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NT	< 250	<250	<250 K-	< 2500	< 1000			
Carbon disulfide			NS	NS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	NT	< 250	<100	<100	< 2500	< 5.0			
Carbon tetrachloride			2	5000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0	< 50	<5.00	<50	< 250	< 100			
Chlorobenzene			200	1000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NT	< 50	<5.00	<50	< 250	< 100			
Chloroethane			NS	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	<1.0	<1.0	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	< 100	<100	<100	< 100	< 200				
Chloroform			50	20000	< 1.0	< 1.0	0.89 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NT	< 50	<5.00	<50	< 380	< 100			
Chloromethane			NS	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	<1.0	<1.0	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	NT	< 100	<100	<100 K-	< 1200	< 200			
1,4-Dichlorobenzene			60	8000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NT	< 50	<5.00	<50	< 1200	< 100			
1,1-Dichloroethane			20000	20000	< 1.0	3.1	5.0	1.1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	22.2	13.0 J	<5.00	<50	< 380	< 100			
1,2-Dichloroethane			5	20000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0	< 50	<5.00	<50	< 250	< 100			
1,1-Dichloroethylene			80	30000	< 1.0	< 1.0	< 1.0	15.5	< 1.0	2.4	0.93 J	0.92 J	< 1.0	0.46 J	1.1	1.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	76.4	36.6 J	<5.00	<50	< 250	< 100			
cis-1,2-Dichloroethylene			20	50000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	102	78.9	<5.00	<50	< 250	< 100			
trans-1,2-Dichloroethylene			90	50000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.2	< 50	<5.00	<50	< 380	< 100			
1,2-Dichloropropane			3	50000	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NT	< 100	<5.00	<50	< 880	< 100			
1,4-Dioxane			5000	50000	< 25	< 25	< 25	< 25	< 25 K-	< 50	< 50	< 50	< 50	<130	<130	<130	<250	<250	<250	<250	<250	<250	NT	< 1300	<12000	<12000	NT	NT			
Ethylbenzene			20000	5000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NT	< 50	<50	<50	< 250	< 100			
2-Hexanone			NS	NS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NT	< 250	<250	<250 K-	< 2500	< 1000			
4-Isopropyltoluene			NS	NS	< 5.0	< 5.0	< 5.0	11.3	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	NT	< 250	<100	<100	< 250	< 100			
Methyl tert-butyl ether			50000	50000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0 K-	< 1.0	< 1.0	< 1.0	<1.0	<1.0	1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	NT	< 50	<100	<100	< 5.0	< 100			
Methylene chloride			2000	50000	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	NT	< 100	<100	<100	< 2500	< 1000			
Naphthalene			700	20000	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NT	< 250	<100	<100	< 1200	< 100			
Tert-amyl methyl ether			NS	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	NT	< 100	<100	<100	NT	NT			
1,1,1,2-Tetrachloroethane			10	50000	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NT	< 250	<50	<50	< 250	< 100			
Tetrachloroethylene (PCE)			20	30000	52.6	61.8	84.9	86.5	20.6	37.0	31.4	28.1	40.8 K+	20.0	39.4	68.9	20.0	14.0	5.4	12.0	9.4	13	15500	11500	7500	5700	16000	16200			
Tetrahydrofuran			NS	NS	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	NT	< 50	<100	<100 K-	NT	NT			
Toluene			50000	40000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NT	< 50	<50	<50	< 380	< 100			
1,1,1-Trichloroethane (TCA)			4000	20000	6.6	14.3 J+	16.8	18.6	2.8	5.2	6.9	7.4	7.1	3.5	8.1	9.8	2.7	1.7	<1.0	1.2	1.4	1.5	1710	988	<50	<50	< 250	< 100			
1,1,2-Trichloroethane			900	50000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.66 J	< 50	<50	<50	< 380	< 100			
Trichloroethylene (TCE)			5	5000	7.2	9.8	12.9	8.2	1.5	2.5	1.5	1.4	1.5	0.81 J	1.5	2.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	979	618	120	110	< 250	< 100			
Vinyl chloride			2	50000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0	< 50	<50	<50	< 5.0	< 100			
m,p-Xylene			3000	5000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	NT	< 50	<100	<100	< 250	< 200			
o-Xylene			3000	5000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NT	< 50	<50	<50	< 250	< 100			
Total Xylene			3000	5000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NT	< 50	<50	<50	ND	ND			
Metals (Total)					6010B	µg/l																									
Arsenic			NS	900	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT			
Iron			NS	NS																											
Manganese			NS	NS																											
Metals (Dissolved)					6010C	µg/l																									
Iron			NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT															

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes refer to the laboratory data reports.
2. ft bgs = feet below ground surface.
3. µg/l = micrograms per liter.
4. "c" = The analyte was not detected at a concentration above the specified reporting.
5. SHA = Sanborn Head & Associates.
6. FD = Field Duplicate Sample.
7. NT = Not Tested.
8. * = micrograms CaCO₃ per liter

Qualifying Notes:

- B The analyte found in associated method blank.
- C The result has a high bias due to surrogate recovery above upper control limits.
- E The value exceeds the calibration range.
- F The result has a high bias due to matrix spike recovery above upper control limits.
- F- The result has a low bias due to matrix spike recovery below lower control limits.
- G The result is estimated due to duplicate precision outside control limits.
- J The reported result is below the laboratory reporting limit and is estimated.
- J- The reported result is estimated.
- K The result has a low bias due to blank spike or laboratory control sample recovery below lower control limits.
- K+ The result has a high bias due to blank spike or laboratory control sample recovery above upper control limits.
- R The result is rejected due to gross exceedence of minimum response factor criteria.

Table 4-2. Chemical Testing Results - GEI Groundwater Sampling
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

Sample Location:					MW-3	MW-3	MW3	MW3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-301	MW-301	MW-CS1	SH-1	SH-3	SH-4	SH-MW1	SH-MW-1	SH-MW-1	SH-MW1	SHMW1	SH-MW2	SH-MW2	SH-MW-2	SH-MW-2	SH-MW2	SHMW2	SH-MW2
Sample Name:					MW-3	MW-3	MW3	MW3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-301	MW-301	MW-CS1	SH-1	SH-3	SH-4	SH-MW1	SH-MW-1	SH-MW-1	SH-MW1	SHMW1	SH-MW2	SH-MW2	SH-MW-2	SH-MW-2	SH-MW2	SHMW2	SH-MW2
Well Screen Interval (ft bgs):					Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	5-15	5-15	Unknown	9 to 14	8 to 13	11 to 16	10 to 30	10 to 30	10 to 30	10 to 30	10 to 30	10 to 25	10 to 25	10 to 25	10 to 25	10 to 25	10 to 25	10 to 25
Sample Date:					5/23/06	1/17/07	4/17/07	4/15/08	7/15/08	10/21/08	1/14/09	4/14/09	7/15/09	10/16/09	1/20/25	4/23/25	5/23/07	8/9/04	8/9/04	5/25/06	7/8/02	5/23/06	10/4/06	1/16/07	4/12/07	7/8/02	8/16/04	5/23/06	10/4/06	1/16/07	4/16/07	7/19/07
Collected By:					GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	Geolnsight	Geolnsight	GEI	SHA	GEI	GEI	GEI	GEI	SHA	Geolnsight	GEI	GEI	GEI	GEI	GEI
Analyte	Method	Units	Method 1 GW 2 Standard	Method 1 GW 3 Standard																												
Volatile Organic Compounds (VOCs)					8260	µg/l																										
Acetone			50000	50000	< 5.0	< 5.0	< 130	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 4000	< 2000	30.0	< 2500	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 250	< 2000	< 5.0	< 5.0	< 5.0	< 10	NT
Benzene			1000	10000	0.37 J	0.71	< 13	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 200	< 100	< 0.50	< 250	< 0.50	0.61	< 0.50	0.33 J	< 25	< 100	< 0.50	< 0.50	< 0.50	< 1.0	NT	
Bromodichloromethane			6	50000	< 1.0	< 1.0	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 200	< 100	< 1.0	< 250	< 1.0	< 1.0	< 1.0	< 1.0	< 25	< 100	< 1.0	< 1.0	< 1.0	< 2.0	NT	
2-Butanone (MEK)			50000	50000	< 5.0	< 5.0	< 130	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0 J+	< 5.0	< 5.0	< 5.0	< 5.0	< 2000	< 1000	< 5.0	< 2500	< 5.0	< 5.0	< 5.0	< 5.0	< 250	< 1000	< 5.0	< 5.0	< 5.0	< 10	NT	
Carbon disulfide			NS	NS	< 5.0	< 5.0	< 130	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0	< 2.0	0.54 J	< 1000	< 5.0	< 5.0	< 2500	< 5.0	< 5.0	< 5.0	< 250	< 5.0	< 5.0	< 5.0	< 5.0	< 10	NT	
Carbon tetrachloride			2	5000	< 1.0	< 1.0	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 200	< 100	< 1.0	< 250	< 1.0	< 1.0	< 1.0	< 1.0	< 25	< 100	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	
Chlorobenzene			200	1000	< 1.0	0.52 J	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 200	< 100	< 1.0	< 250	< 1.0	0.52 J	< 1.0	< 1.0	< 25	< 100	< 1.0	< 1.0	< 1.0	< 2.0	NT	
Chloroethane			NS	NS	< 2.0	< 2.0	< 50	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 400	< 200	< 2.0	< 5.0	< 2.0	< 2.0	< 2.0	< 2.0	< 5.0	< 200	< 2.0	< 2.0	< 2.0	< 4.0	< 2.0	
Chloroform			50	20000	2.1	3.4	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 200	< 100	13.3	< 380	2.1	4.6	1.7	3.4	< 38	< 100	< 1.0	< 1.0	< 1.0	< 2.0	NT	
Chloromethane			NS	NS	< 2.0	< 2.0	< 50	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 400	< 200	< 2.0	< 1200	< 2.0	< 2.0	< 2.0	< 2.0	< 120	< 200	< 2.0	< 2.0	< 2.0	< 4.0	NT	
1,4-Dichlorobenzene			60	8000	< 1.0	< 1.0	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 200	< 100	< 1.0	< 1200	< 1.0	< 1.0	< 1.0	< 1.0	< 120	< 100	< 1.0	< 1.0	< 1.0	< 2.0	NT	
1,1-Dichloroethane			2000	20000	< 1.0	< 1.0	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 200	< 100	15.9	< 380	11.4	12.0	8.5	12.7	< 38	< 100	1.0	20.9	5.7	< 2.0	12.4	
1,2-Dichloroethane			5	20000	< 1.0	< 1.0	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 200	< 100	103	< 250	< 1.0	< 1.0	< 1.0	< 1.0	< 25	< 100	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	
1,1-Dichloroethylene			80	30000	6.9	5.6	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 200	< 100	556 E	< 250	11.7	19.3	9.0	24.4	< 25	< 100	10.1	45.0	9.8	2.1	23.8	
cis-1,2-Dichloroethylene			20	50000	< 1.0	1.9	< 25	< 1.0	0.56 J	< 1.0	< 1.0	< 1.0	0.43 J	2.3 J+	< 1.0	< 1.0	< 200	< 100	16.6	< 250	2.1	7.3	11.2	2.7	< 25	< 100	3.9	45.7	14.7	1.4 J	26.1	
trans-1,2-Dichloroethylene			90	50000	< 1.0	< 1.0	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 200	< 100	< 1.0	< 380	< 1.0	< 1.0	< 1.0	< 1.0	< 38	< 100	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	
1,2-Dichloropropane			3	50000	< 2.0	< 2.0	< 50	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 2.0	< 200	< 100	< 2.0	< 880	< 2.0	< 2.0	< 2.0	< 88	< 100	< 2.0	< 2.0	< 2.0	< 4.0	NT	
1,4-Dioxane			5000	50000	< 25	< 25	< 630	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 250	< 250	< 25	NT	NT	57700	NT	< 25	< 25 R	< 25	< 25	NT	NT	< 25	< 25 R	< 25	< 5.0	NT
Ethylbenzene			20000	5000	< 1.0	< 1.0	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 200	< 100	< 1.0	< 250	< 1.0	< 1.0	< 1.0	< 1.0	< 25	< 100	< 1.0	< 1.0	< 1.0	< 2.0	NT	
2-Hexanone			NS	NS	< 5.0	< 5.0	< 130	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 2000	< 1000	5.3	NT	< 5.0	< 5.0	< 5.0	< 5.0	NT	< 1000	< 5.0	< 5.0	< 5.0	< 10	NT	
4-Isopropyltoluene			NS	NS	< 5.0	< 5.0	< 130	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 200	< 100	< 5.0	< 250	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 100	< 5.0	< 5.0	< 5.0	< 10	NT	
Methyl tert-butyl ether			50000	50000	< 1.0	< 1.0	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 200	< 100	< 1.0	< 5.0	< 1.0	0.71 J J+	< 1.0	0.74 J J+	< 5.0	< 100	< 1.0	8.7 J+	1.4	< 2.0	NT	
Methylene chloride			2000	50000	< 2.0	< 2.0	71.5	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2000	< 1000	12.2	< 2500	< 2.0	< 2.0	< 2.0	< 2.0	< 250							

Table 4-2. Chemical Testing Results - GEI Groundwater Sampling
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

Sample Location:					SH-MW2	SH-MW2	SH-MW2	SH-MW2R	SH-MW2R	SH-MW3	SH-MW-3	SH-MW-3	SH-MW3	SHMW3	SHMW3	SHMW3	SHMW3	SH-MW3	SH-MW3	SH-MW3	SH-MW3	SH-MW3	COBBLE-IR-1
Sample Name:					SH-MW2	SH-MW2	SH-MW2	SH-MW2R	SH-MW2R	SH-MW3	SH-MW-3	SH-MW-3	SH-MW3	SHMW3	SHMW3	SHMW3	SHMW3	SH-MW3	SH-MW3	SH-MW3	SH-MW3	SH-MW3	COBBLE-IR-1
Well Screen Interval (ft bgs):					10 to 25	10 to 25	10 to 25	10 to 23	10 to 23	10 to 24	10 to 24	10 to 24	10 to 24	10 to 24	10 to 24	10 to 24	10 to 24	10 to 24	10 to 24	10 to 24	10 to 24	Unknown	
Sample Date:					4/28/17	4/4/18	4/16/19	4/3/24	4/24/25	7/8/02	5/23/06	10/4/06	1/17/07	4/12/07	4/15/08	4/13/10	4/21/11	4/16/12	4/23/13	4/30/14	4/2/15	6/25/07	
Collected By:					GEI	GEI	GEI	GEI	GEI	SHA	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	
Analyte	Method	Units	Method 1 GW 2 Standard	Method 1 GW 3 Standard																			
Volatile Organic Compounds (VOCs)					8260	µg/l																	
Acetone			50000	50000	<10	<10	<10	<100	<200	<2500	<5.0	<5.0	<500	<5.0	<500	<5.0	<500	<250	<500	<10	<500	5.8	
Benzene			1000	10000	<0.50	<0.50	<0.50	<10	<20	<250	<0.50	<0.50	<50	<0.50	<500	<0.50	<50	<25	<25	<0.50	<25	<0.50	
Bromodichloromethane			6	50000	<1.0	<1.0	<1.0	<20	<40	<250	<1.0	<1.0	<100	<1.0	<100	<1.0	<100	<50	<50	<1.0	<50	0.32 J	
2-Butanone (MEK)			50000	50000	<10	<10	<10	<100	<200 K-	<2500	<5.0	<5.0	<500	<5.0	<500	<5.0	<500	<250	<250	<5.0	<250	<5.0	
Carbon disulfide			NS	NS	<2.0	<2.0	<2.0	<40	<80	<2500	<5.0	<5.0	<500	<5.0	<500	<5.0	<500	<250	<250	<5.0	<250	<5.0	
Carbon tetrachloride			2	5000	<1.0	<1.0	<1.0	<20	<40	<250	<1.0	<1.0	<100	<1.0	<100	<1.0	<100	<50	<50	<1.0	<50	<1.0	
Chlorobenzene			200	1000	<1.0	<1.0	<1.0	<20	<40	<250	<1.0	<1.0	<100	<1.0	<100	<1.0	<100	<50	<50	<1.0	<50	<1.0	
Chloroethane			NS	NS	<1.0	<1.0	<1.0	<40	<80	<5.0	<2.0	<2.0	<200	<2.0	<200	<2.0	<200	<100	<100	<2.0	<100	<2.0	
Chloroform			50	20000	<1.0	<1.0	<1.0	<20	<40	<380	0.88 J	0.81 J	<100	1.1	<100	<1.0	<100	<50	<50	<1.0	<50	5.6	
Chloromethane			NS	NS	<1.0	<1.0	<1.0	<40	<80 K-	<1200	<2.0	<2.0	<200	<2.0	<200	<2.0	<200	<100	<100	<2.0	<100	<2.0	
1,4-Dichlorobenzene			60	8000	<1.0	<1.0	<1.0	<20	<40	<1200	<1.0	<1.0	<100	<1.0	<100	<1.0	<100	<50	<50	<1.0	<50	<1.0	
1,1-Dichloroethane			2000	20000	<1.0	<1.0	<1.0	<20	<40	<380	21.6	36.5	<100	24.5	<100	19.5	<100	<50	<50	12.6	24.0 J	<1.0	
1,2-Dichloroethane			5	20000	<1.0	<1.0	<1.0	<20	<40	<250	<1.0	<1.0	<100	<1.0	<100	<1.0	<100	<50	<50	<1.0	<50	<1.0	
1,1-Dichloroethylene			80	30000	0.65 J	<1.0	<1.0	<20	<40	<250	91.0	84.4	<100	91.3	<100	14.2	<100	<50	<50	12.5	<50	<1.0	
cis-1,2-Dichloroethylene			20	50000	1.7	2.3	3.1	<20	<40	<250	37.2	102	<100	39.8	34.5 J	19.8	<100	<50	<50	40.1	27.7 J	<1.0	
trans-1,2-Dichloroethylene			90	50000	<1.0	<1.0	<1.0	<20	<40	<380	<1.0	1.1	<100	<1.0	<100	<1.0	<100	<50	<50	<1.0	<50	<1.0	
1,2-Dichloropropane			3	50000	<1.0	<1.0	<1.0	<20	<40	<880	<2.0	<2.0	<200	<2.0	<200	<2.0	<200	<100	<100	<2.0	<100	<2.0	
1,4-Dioxane			5000	50000	<130	<130	<130	<5000	<10000	NT	<25	<25 R	<2500	<25	<2500	<25	<2500	<1300	<2600	<25 K-	<1300	<25	
Ethylbenzene			20000	5000	<1.0	<1.0	<1.0	<20	<40	<250	<1.0	<1.0	180	<1.0	<100	<1.0	<100	<50	<50	<1.0	<50	<1.0	
2-Hexanone			NS	NS	<5.0	<5.0	<5.0	<100	<200 K-	NT	<5.0	<5.0	<500	<5.0	<500	<5.0	<500	<250	<250	<5.0	<250	<5.0	
4-Isopropyltoluene			NS	NS	<2.0	<2.0	<2.0	<40	<80	<250	<5.0	<5.0	<500	<5.0	<500	<5.0	<500	<250	<250	<5.0	<250	<5.0	
Methyl tert-butyl ether			50000	50000	<1.0	<1.0	<1.0	<40	<80	<5.0	5.1	8.2 J+	<100	2.4 J+	<100	0.83 J	<100	<50	<50 K-	<1.0	<50	<1.0	
Methylene chloride			2000	50000	<2.0	<2.0	<2.0	<40	<80	<2500	<2.0	<2.0	<200	<2.0	<200	<2.0	450	<100	<100	<2.0	<100	<2.0	
Naphthalene			700	20000	<5.0	<5.0	<5.0	<40	<80	<1200	<5.0	<5.0	392 J	<5.0	<500	<5.0	<500	<250	<250	<5.0	<250	<5.0	
Tert-amyl methyl ether			NS	NS	<2.0	<2.0	<2.0	<40	<80	NT	<2.0	<2.0	<200	<2.0	<200	<2.0	<200	<100	<100	<2.0	<100	<2.0	
1,1,1,2-Tetrachloroethane			10	50000	<1.0	<1.0	<1.0	<20	<40	<250	<5.0	<5.0	<500	<5.0	<500	<5.0	<500	<250	<250	<5.0	<50	<5.0	
Tetrachloroethylene (PCE)			20	30000	365	459	439	2500	3800	26000	16900	28300	29700	34000	15200	20300	16900	7310	9650	14500	12800	<1.0	
Tetrahydrofuran			NS	NS	<10	<10	<10	<40	<80 K-	NT	<10	<10	<1000	<10	<1000	<10	<1000	<500	<500	<10 G	<500	<10	
Toluene			50000	40000	<1.0	<1.0	<1.0	<20	<40	<380	<1.0	<1.0	<100	<1.0	<100	<1.0	<100	<50	<50	<1.0	<50	<1.0	
1,1,1-Trichloroethane (TCA)			4000	20000	6.8	7.9	14.8	<20	<40	1200	989	1680	806	621 E J+	119	19.8 J	<100	83.0	<50	48.0	49.9 J	<1.0	
1,1,2-Trichloroethane			900	50000	<1.0	<1.0	<1.0	<20	<40	<380	<1.0	<1.0	<100	<1.0	<100	<1.0	<100	<50	<50	<1.0	<50	<1.0	
Trichloroethylene (TCE)			5	5000	13.2	14.8	16.7	42	56	870	482	1030	709	1030	306	383.0	342	152	157	231	218	<1.0	
Vinyl chloride			2	50000	<1.0	<1.0	<1.0	<20	<40	<5.0	<1.0	<1.0	<100	0.83 J	<100	<1.0	<100	<50	<50	<1.0	<50	<1.0	
m,p-Xylene			3000	5000	<1.0	<1.0	<1.0	<40	<80	<250	<1.0	<1.0	484	<1.0	<100	<1.0	<100	<50	<50	<1.0	<50	<1.0	
o-Xylene			3000	5000	<1.0	<1.0	<1.0	<20	<40	<250	<1.0	<1.0	<100	<1.0	<100	<1.0	<100	<50	<50	<1.0	<50	<1.0	
Total Xylene			3000	5000	<1.0	<1.0	<1.0	<20	<40	ND	<1.0	<1.0	543	<1.0	<100	<1.0	<100	<50	<50	<1.0	<50	<1.0	
Metals (Total)					6010B	µg/l																	
Arsenic			NS	900			NT						<10										
Iron			NS	NS			NT						255										
Manganese			NS	NS			<15						NT										
Metals (Dissolved)					6010C	µg/l																	
Iron			NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
Others					NT	NT		NT	NT	NT	NT	NT		NT	NT	NT	NT	NT	NT	NT	NT	NT	
Methane	8015	µg/l	NS	NS			0.21						<10										
Ethane	8015	µg/l	NS	NS			<0.23						<10										
Ethylene	8015	µg/l	NS	NS			<0.31						<10										
Alkalinity	E310.1	µg/l*	NS	NS			143000						208000										
Chloride	E325.3	µg/l	NS	NS			38600						362000										
Iron, Ferrous	3500FE B	µg/l	NS	NS			<200						NT										
Nitrate & Nitrite as N	E353.2	µg/l	NS	NS			2600						1900										
Nitrogen, Nitrate	E353.2	µg/l	NS	NS			2600						1900										
Nitrogen, Nitrite	E354.1	µg/l	NS	NS			<10						30										

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes refer to the laboratory data reports.
2. ft bgs = feet below ground surface.
3. µg/l = micrograms per liter.
4. "<" = The analyte was not detected at a concentration above the specified reporting.
5. SHA = Sanborn Head & Associates.
6. FD = Field Duplicate Sample.
7. NT = Not Tested.
8. * = micrograms CaCO3 per liter

Qualifying Notes:

B The analyte found in associated method blank.

C+ The result has a high bias due to surrogate recovery above upper control limits.

E The value exceeds the calibration range.

F+ The result has a high bias due to matrix spike recovery above upper control limits.

F- The result has a low bias due to matrix spike recovery below lower control limits.

G The result is estimated due to duplicate precision outside control limits.

J The reported result is below the laboratory reporting limit and is estimated.

J+ The reported result is estimated.

K- The result has a low bias due to blank spike or laboratory control sample recovery below lower control limits.

K+ The result has a high bias due to blank spike or laboratory control sample recovery above upper control limits

R The result is rejected due to gross exceedence of minimum response factor criteria.

Table 4-3. Groundwater Elevations
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

		Gauging Date:	5/15/2006		5/16/2006		5/23/2006		5/31/2006		7/24/2006		8/1/2006		8/3/2006		8/16/2006	
Monitoring Well ID	Well Screen Interval (ft bgs)	Elevation of Measuring Point (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)
MW-1	unknown	25.90	9.69	16.21	9.53	16.37	10.9	15	11.39	14.51	--	--	--	--	--	--	11.9	14
MW-2	unknown	25.38	8.99	16.39	10.36	15.02	Dry	Dry	Dry	Dry	--	--	--	--	--	--	Dry	Dry
MW-3	unknown	25.31	8.88	16.43	9.32	15.99	11.16	14.15	12.71	12.6	--	--	--	--	--	--	13.73	11.58
MW-101	9 - 19	26.75	--	--	10.56	16.19	11.53	15.22	12.1	14.65	12.33	14.42	12.51	14.24	13.47	13.28	12.78	13.97
MW-102	6 - 16	18.89	--	--	6.62	12.27	6.86	12.03	7.44	11.45	7.93	10.96	8.16	10.73	9.11	9.78	8.51	10.38
MW-103	6 - 16	19.47	--	--	9.5	9.97	10.37	9.1	10.74	8.73	11.15	8.32	11.31	8.16	12.24	7.23	11.72	7.75
MW-104	5 - 15	17.67	--	--	--	--	7.93	9.74	8.89	8.78	9.06	8.61	9.39	8.28	10.29	7.38	9.87	7.8
MW-104R	5 - 15	15.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-105	19 - 29	38.84	--	--	19.49	19.35	20.21	18.63	20.7	18.14	21.18	17.66	21.43	17.41	22.41	16.43	21.91	16.93
MW-106	9 - 19	26.33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-107	2 - 12	14.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-108	2 - 12	12.74	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-109	3 - 13	24.12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-110	3 - 13	15.58	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-111	4 - 14	18.95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-111R	5 - 15	18.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-112	3 - 10	18.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-112a	4 - 19	17.78	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-113	10 - 20	26.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-114	7 - 17	29.43	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-115/115R	10 - 25	27.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-116	5 - 15	13.45	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-117S	5 - 20	21.94	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-117T	35 - 45	21.87	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-117D	60 - 70	21.78	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-118S	3 - 14	15.52	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-118T	39.5 - 49.5	15.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-118D	70 - 80	15.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-119S	5 - 20	11.74	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-119T	42 - 47	11.67	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-120S	5 - 20	12.54	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-120D	28 - 38	12.45	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-121S	5 - 20	12.44	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-121D	32 - 47	12.81	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-122	4 - 16	16.42	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GEO-1	5 - 20	25.88	9.69	16.19	9.9	15.98	10.92	14.96	11.36	14.52	--	--	--	--	--	--	11.82	14.06
GEO-2	5 - 20	26.54	9.76	16.78	--	--	11.38	15.16	11.91	14.63	--	--	--	--	--	--	12.51	14.03
GEO-3	5 - 20	25.64	10.43	15.21	9.59	16.05	9.87	15.77	10.67	14.97	11.67	13.97	11.85	13.79	12.84	12.8	12.25	13.39
GEO-4	4 - 19	21.69	--	--	7.79	13.9	9.85	11.84	10.78	10.91	11.25	10.44	11.45	10.24	12.43	9.26	11.9	9.79
GEO-5	5 - 20	20.14	--	--	6.78	13.36	9.08	11.06	9.96	10.18	10.29	9.85	10.56	9.58	11.51	8.63	10.99	9.15
GEO-6	5 - 20	17.62	--	--	5.66	11.96	7.39	10.23	8.23	9.39	8.43	9.19	8.73	8.89	9.64	7.98	9.25	8.37
SH-1	9 - 14	29.55	10.15	19.4	11.4	18.15	Dry	Dry	Dry	Dry	--	--	--	--	--	--	Dry	Dry
SH-2	7 - 14	29.64	5.71	23.93	7.86	21.78	12.07	17.57	12.22	17.42	--	--	--	--	--	--	11.98	17.66
SH-3	8 - 13	29.66	7.54	22.12	8.56	21.1	12.73	16.93	12.96	16.7	--	--	--	--	--	--	Dry	Dry
SH-4	11 - 16	29.63	13.53	16.1	13.48	16.15	14.48	15.15	15.02	14.61	--	--	--	--	--	--	15.09	14.54
SH-5	8 - 13	29.63	Dry	Dry	--	--	12.99	16.64	13.03	16.6	--	--	--	--	--	--	Dry	Dry
SH-MW1	10 - 30	24.02	6.72	17.3	--	--	11.44	12.58	12.18	11.84	--	--	--	--	--	--	13.09	10.93
SH-MW2	10 - 25	24.27	9.33	14.94	--	--	12.05	12.22	12.69	11.58	--	--	--	--	--	--	13.38	10.89
SH-MW2R	10 - 23	24.56	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-MW3	10 - 24	22.31	7.8	14.51	--	--	10.26	12.05	11.03	11.28	--	--	--	--	--	--	13	9.31
MW201	11 - 21	27.51	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW202	10.5 - 20.5	27.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW203	6 - 18	21.80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW203R	13 - 23	24.97	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW301	5-15	13.24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

- General Notes:**
- ft = feet.
 - bgs = below ground surface.
 - ID = identification.
 - GW = groundwater.
 - NAVD = North American Vertical Datum of 1988.
 - The top of the PVC riser was used as the measuring point for depth to groundwater.
 - "--" = Well not yet installed, abandoned, or not measured.
 - NM = Not measured.

Table 4-3. Groundwater Elevations
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

		Gauging Date:	9/29/2006		10/4/2006		11/14/2006		12/12/2006		1/16/2007		2/12/2007		3/14/2007		4/12/2007	
Monitoring Well ID	Well Screen Interval (ft bgs)	Elevation of Measuring Point (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)
MW-1	unknown	25.90	--	--	11.88	14.02	--	--	--	--	11.6	14.3	--	--	--	--	11.39	14.51
MW-2	unknown	25.38	--	--	--	--	--	--	--	--	Destroyed	Destroyed	--	--	--	--	--	--
MW-3	unknown	25.31	--	--	13.75	11.56	--	--	--	--	13.05	12.26	--	--	--	--	12.57	12.74
MW-101	9 - 19	26.75	12.85	13.9	12.76	13.99	12.25	14.5	12.57	14.18	12.4	14.35	12.81	13.94	12.34	14.41	12.11	14.64
MW-102	6 - 16	18.89	8.68	10.21	8.52	10.37	7.64	11.25	8.01	10.88	7.72	11.17	8.52	10.37	--	--	7.46	11.43
MW-103	6 - 16	19.47	11.98	7.49	11.92	7.55	11	8.47	11.21	8.26	10.88	8.59	11.74	7.73	11	8.47	10.66	8.81
MW-104	5 - 15	17.67	9.95	7.72	9.92	7.75	--	--	--	--	8.73	8.94	--	--	--	--	8.75	8.92
MW-104R	5 - 15	15.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-105	19 - 29	38.84	22.27	16.57	22.18	16.66	21.16	17.68	21.76	17.08	21.46	17.38	22.03	16.81	21.56	17.28	20.88	17.96
MW-106	9 - 19	26.33	--	--	--	--	--	--	--	--	--	--	12.27	14.06	12.91	13.42	11.65	14.68
MW-107	2 - 12	14.63	--	--	--	--	--	--	--	--	--	--	4.54	10.09	4.5	10.13	4.49	10.14
MW-108	2 - 12	12.74	--	--	--	--	--	--	--	--	--	--	4.93	7.81	4.02	8.72	9.91	2.83
MW-109	3 - 13	24.12	--	--	--	--	--	--	--	--	--	--	12.07	12.05	11.27	12.85	10.27	13.85
MW-110	3 - 13	15.58	--	--	--	--	--	--	--	--	--	--	5.99	9.59	1.46	14.12	1.04	14.54
MW-111	4 - 14	18.95	--	--	--	--	--	--	--	--	--	--	11.38	7.57	10.62	8.33	10.65	8.3
MW-111R	5 - 15	18.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-112	3 - 10	18.16	--	--	--	--	--	--	--	--	--	--	Dry	Dry	8.01	10.15	Dry	Dry
MW-112a	4 - 19	17.78	--	--	--	--	--	--	--	--	--	--	--	--	12.76	5.02	12.76	5.02
MW-113	10 - 20	26.16	--	--	--	--	--	--	--	--	--	--	--	--	11.66	14.5	11.44	14.72
MW-114	7 - 17	29.43	--	--	--	--	--	--	--	--	--	--	--	--	12.67	16.76	11.27	18.16
MW-115/115R	10 - 25	27.15	--	--	--	--	--	--	--	--	--	--	--	--	17.19	9.96	16.21	10.94
MW-116	5 - 15	13.45	--	--	--	--	--	--	--	--	--	--	--	--	8.78	4.67	8.34	5.11
MW-117S	5 - 20	21.94	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-117T	35 - 45	21.87	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-117D	60 - 70	21.78	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-118S	3 - 14	15.52	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-118T	39.5 - 49.5	15.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-118D	70 - 80	15.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-119S	5 - 20	11.74	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-119T	42 - 47	11.67	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-120S	5 - 20	12.54	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-120D	28 - 38	12.45	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-121S	5 - 20	12.44	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-121D	32 - 47	12.81	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-122	4 - 16	16.42	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GEO-1	5 - 20	25.88	--	--	11.85	14.03	--	--	--	--	11.55	14.33	--	--	--	--	11.36	14.52
GEO-2	5 - 20	26.54	--	--	12.51	14.03	--	--	--	--	12.2	14.34	--	--	--	--	11.97	14.57
GEO-3	5 - 20	25.64	12.37	2.84	12.35	13.29	11.63	14.01	11.72	13.92	11.58	14.06	12.21	13.43	11.49	14.15	10.76	14.88
GEO-4	4 - 19	21.69	12.09	9.6	12.04	9.65	10.58	11.11	11.31	10.38	10.77	10.92	11.83	9.86	11.03	10.66	10.51	11.18
GEO-5	5 - 20	20.14	11.21	8.93	11.15	8.99	9.47	10.67	10.48	9.66	9.73	10.41	11.02	9.12	10.15	9.99	9.7	10.44
GEO-6	5 - 20	17.62	9.41	8.21	9.26	8.36	7.65	9.97	8.82	8.8	8.11	9.51	9.3	8.32	8.54	9.08	8.32	9.3
SH-1	9 - 14	29.55	--	--	Dry	Dry	--	--	--	--	Dry	Dry	--	--	--	--	--	--
SH-2	7 - 14	29.64	--	--	12	17.64	--	--	--	--	Dry	Dry	--	--	--	--	--	--
SH-3	8 - 13	29.66	--	--	Dry	Dry	--	--	--	--	Dry	Dry	--	--	--	--	--	--
SH-4	11 - 16	29.63	--	--	15.1	14.53	--	--	--	--	Dry	Dry	--	--	--	--	--	--
SH-5	8 - 13	29.63	--	--	Dry	Dry	--	--	--	--	Dry	Dry	--	--	--	--	--	--
SH-MW1	10 - 30	24.02	--	--	13.17	10.85	--	--	--	--	12.21	11.81	--	--	--	--	12.01	12.01
SH-MW2	10 - 25	24.27	--	--	13.41	10.86	--	--	--	--	12.73	11.54	--	--	--	--	12.61	11.66
SH-MW2R	10 - 23	24.56	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-MW3	10 - 24	22.31	--	--	12.04	10.27	--	--	--	--	11.04	11.27	--	--	--	--	10.81	11.5
MW201	11 - 21	27.51	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW202	10.5 - 20.5	27.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW203	6 - 18	21.80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW203R	13 - 23	24.97	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW301	5-15	13.24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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- ft = feet.
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 - GW = groundwater.
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 - The top of the PVC riser was used as the measuring point for depth to groundwater.
 - "--" = Well not yet installed, abandoned, or not measured.
 - NM = Not measured.

Table 4-3. Groundwater Elevations
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

Gauging Date:			5/29/2007		6/26/2007		7/16/2007		8/22/2007		9/27/2007		10/23/2007		11/30/2007		1/9/2008	
Monitoring Well ID	Well Screen Interval (ft bgs)	Elevation of Measuring Point (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)
MW-1	unknown	25.90	11.41	14.49	11.8	14.1	12.04	13.86	--	--	12.26	13.64	12.07	13.83	11.95	13.95	--	--
MW-2	unknown	25.38	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	unknown	25.31	14.89	10.42	13.6	11.71	13.94	11.37	--	--	14.34	10.97	13.94	11.37	13.75	11.56	12.86	12.45
MW-101	9 - 19	26.75	12.17	14.58	12.62	14.13	12.85	13.9	13.03	13.72	13.17	13.58	12.91	13.84	13.82	12.93	12.11	14.64
MW-102	6 - 16	18.89	6.72	12.17	8.36	10.53	8.74	10.15	9.08	9.81	9.35	9.54	8.97	9.92	8.01	10.88	7.46	11.43
MW-103	6 - 16	19.47	10.81	8.66	11.47	8.0	11.92	7.55	12.3	7.17	12.63	6.84	--	--	12.18	7.29	10.74	8.73
MW-104	5 - 15	17.67	--	--	9.62	8.05	10.09	7.58	10.36	7.31	10.61	7.06	10.31	7.36	10.07	7.6	8.86	8.81
MW-104R	5 - 15	15.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-105	19 - 29	38.84	20.86	17.98	21.55	17.29	22.13	16.71	22.79	16.05	23.18	15.66	22.96	15.88	22.74	16.1	21.39	17.45
MW-106	9 - 19	26.33	11.69	14.64	12.07	14.26	12.33	14	12.48	13.85	12.61	13.72	12.39	13.94	12.27	14.06	11.71	14.62
MW-107	2 - 12	14.63	4.46	10.17	4.48	10.15	4.52	10.11	4.75	9.88	4.51	10.12	4.47	10.16	4.44	10.19	4.35	10.28
MW-108	2 - 12	12.74	4.25	8.49	5.06	7.68	6.59	6.15	6.25	6.49	6.28	6.46	5.86	6.88	4.74	8.0	3.71	9.03
MW-109	3 - 13	24.12	10.73	13.39	11.76	12.36	12.24	11.88	Dry	Dry	Dry	Dry	Dry	Dry	12.78	11.34	10.64	13.48
MW-110	3 - 13	15.58	2.56	13.02	6.57	9.01	7.17	8.41	7.86	7.72	8.37	7.21	6.92	8.66	3.34	12.24	--	--
MW-111	4 - 14	18.95	10.68	8.27	11.11	7.84	11.54	7.41	11.96	6.99	12.34	6.61	11.99	6.96	12.27	6.68	10.51	8.44
MW-111R	5 - 15	18.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-112	3 - 10	18.16	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry
MW-112a	4 - 19	17.78	12.67	5.11	12.81	4.97	12.88	4.9	--	--	12.95	4.83	12.8	4.98	--	--	12.43	5.35
MW-113	10 - 20	26.16	11.51	14.65	11.99	14.17	12.22	13.94	12.43	13.73	12.58	13.58	12.3	13.86	12.6	13.56	11.5	14.66
MW-114	7 - 17	29.43	11.53	17.9	12.88	16.55	15.57	13.86	14.24	15.19	14.84	14.59	14.66	14.77	14.31	15.12	12.08	17.35
MW-115/115R	10 - 25	27.15	16.63	10.52	17.42	9.73	17.97	9.18	18.38	8.77	18.81	8.34	18.37	8.78	18.24	8.91	16.18	10.97
MW-116	5 - 15	13.45	8.65	4.8	8.76	4.69	--	--	8.85	4.6	8.91	4.54	8.83	4.62	--	--	8.6	4.85
MW-117S	5 - 20	21.94	--	--	--	--	15.27	6.67	15.7	6.24	16.03	5.91	16.2	5.74	15.95	5.99	13.97	7.97
MW-117T	35 - 45	21.87	--	--	--	--	15.95	5.92	16.38	5.49	16.81	5.06	16.91	4.96	16.58	5.29	14.58	7.29
MW-117D	60 - 70	21.78	--	--	--	--	15.87	5.91	16.26	5.52	16.69	5.09	16.77	5.01	16.44	5.34	14.46	7.32
MW-118S	3 - 14	15.52	--	--	--	--	11.64	3.88	9.84	5.68	10.2	5.32	9.42	6.1	9.4	6.12	8.55	6.97
MW-118T	39.5 - 49.5	15.30	--	--	--	--	10.36	4.94	10.51	4.79	10.74	4.56	10.68	4.62	10.5	4.8	9.93	5.37
MW-118D	70 - 80	15.15	--	--	--	--	10.18	4.97	10.32	4.83	10.55	4.6	10.49	4.66	10.25	4.9	9.55	5.6
MW-119S	5 - 20	11.74	--	--	--	--	--	--	4.91	6.83	4.99	6.75	4.93	6.81	4.85	6.89	4.63	7.11
MW-119T	42 - 47	11.67	--	--	--	--	--	--	6.45	5.22	6.8	4.87	6.72	4.95	6.57	5.1	5.82	5.85
MW-120S	5 - 20	12.54	--	--	--	--	--	--	5.25	7.29	5.35	7.19	4.71	7.83	4.62	7.92	3.51	9.03
MW-120D	28 - 38	12.45	--	--	--	--	--	--	--	--	4.21	8.24	3.94	8.51	3.48	8.97	3.17	9.28
MW-121S	5 - 20	12.44	--	--	--	--	--	--	--	--	--	--	7.36	5.08	7.41	5.03	7.24	5.2
MW-121D	32 - 47	12.81	--	--	--	--	--	--	--	--	--	--	7.92	4.89	7.75	5.06	6.95	5.86
MW-122	4 - 16	16.42	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GEO-1	5 - 20	25.88	11.38	14.5	11.73	14.15	11.93	13.95	12.1	13.78	12.21	13.67	11.98	13.9	11.91	13.97	11.41	14.47
GEO-2	5 - 20	26.54	11.99	14.55	12.4	14.14	13.6	12.94	12.81	13.73	12.91	13.63	12.63	13.91	12.57	13.97	12.02	14.52
GEO-3	5 - 20	25.64	11.04	14.6	11.94	13.7	--	--	12.7	12.94	12.94	12.7	12.61	13.03	12.54	13.1	10.99	14.65
GEO-4	4 - 19	21.69	10.87	10.82	11.64	10.05	12.09	9.6	12.55	9.14	13.02	8.67	12.64	9.05	12.47	9.22	11.72	9.97
GEO-5	5 - 20	20.14	10.01	10.13	10.79	9.35	11.25	8.89	11.74	8.4	11.18	8.96	11.72	8.42	12.62	7.52	9.92	10.22
GEO-6	5 - 20	17.62	8.25	9.37	8.9	8.72	9.5	8.12	9.92	7.7	10.22	7.4	9.96	7.66	9.96	7.66	8.21	9.41
SH-1	9 - 14	29.55	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-2	7 - 14	29.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-3	8 - 13	29.66	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-4	11 - 16	29.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-5	8 - 13	29.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-MW1	10 - 30	24.02	12.26	11.76	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-MW2	10 - 25	24.27	12.74	11.53	13.25	11.02	13.48	10.79	13.72	10.55	14.04	10.23	13.68	10.59	13.85	10.42	12.77	11.5
SH-MW2R	10 - 23	24.56	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-MW3	10 - 24	22.31	--	--	11.72	10.59	12.08	10.23	12.43	9.88	12.79	9.52	12.41	9.9	12.05	10.26	11.55	10.76
MW201	11 - 21	27.51	--	--	--	--	--	--	13.71	13.8	13.83	13.68	13.58	13.93	13.5	14.01	12.98	14.53
MW202	10.5 - 20.5	27.82	--	--	--	--	--	--	13.99	13.83	14.08	13.74	13.88	13.94	13.81	14.01	13.41	14.41
MW203	6 - 18	21.80	--	--	--	--	--	--	14.05	7.75	14.39	7.41	13.86	7.94	13.61	8.19	12.86	8.94
MW203R	13 - 23	24.97	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW301	5-15	13.24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

- General Notes:**
- ft = feet.
 - bgs = below ground surface.
 - ID = identification.
 - GW = groundwater.
 - NAVD = North American Vertical Datum of 1988.
 - The top of the PVC riser was used as the measuring point for depth to groundwater.
 - "-" = Well not yet installed, abandoned, or not measured.
 - NM = Not measured.

Table 4-3. Groundwater Elevations
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

Gauging Date:			2/26/2008		3/18/2008		4/15/2008		5/19/2008		7/14/08		8/22/08		10/20/08		1/13/09	
Monitoring Well ID	Well Screen Interval (ft bgs)	Elevation of Measuring Point (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)
MW-1	unknown	25.90	--	--	--	--	11.42	14.48	11.57	14.33	--	--	--	--	--	--	--	--
MW-2	unknown	25.38	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	unknown	25.31	12.05	13.26	12.37	12.94	12.81	12.5	12.99	--	--	--	--	--	--	--	12.49	12.82
MW-101	9 - 19	26.75	--	--	11.85	14.9	12.02	14.73	12.26	14.49	13.11	13.64	--	--	12.61	14.14	12.07	14.68
MW-102	6 - 16	18.89	7.29	11.6	7.17	11.72	8.57	10.32	7.9	10.99	9.51	9.38	8.00	10.89	8.49	10.4	7.50	11.39
MW-103	6 - 16	19.47	10.51	8.96	10.5	8.97	10.82	8.65	11.11	8.36	12.17	7.30	11.17	8.30	11.87	7.6	10.73	8.74
MW-104	5 - 15	17.67	8.61	9.06	8.48	9.19	9.84	7.83	9.25	8.42	9.67	8.00	9.06	8.61	9.72	7.95	8.71	8.96
MW-104R	5 - 15	15.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-105	19 - 29	38.84	20.79	18.05	20.41	18.43	20.91	17.93	21.24	17.6	22.02	16.82	21.40	17.44	21.8	17.04	20.9	17.94
MW-106	9 - 19	26.33	11.51	14.82	11.38	14.95	12.54	13.79	11.72	14.61	11.68	14.65	11.73	14.60	11.64	14.69	11.6	14.73
MW-107	2 - 12	14.63	--	--	4.46	10.17	5.58	9.05	--	--	4.52	10.11	4.41	10.22	4.49	10.14	4.5	10.13
MW-108	2 - 12	12.74	4.61	8.13	3.68	9.06	3.91	8.83	3.99	8.75	5.16	7.58	4.44	8.30	4.71	8.03	3.4	9.34
MW-109	3 - 13	24.12	10.06	14.06	10.02	14.1	11.64	12.48	11.29	12.83	11.87	12.25	11.18	12.94	11.73	12.39	10.43	13.69
MW-110	3 - 13	15.58	0.79	14.79	1.12	14.46	1.57	14.01	2.5	13.08	--	--	3.59	11.99	--	--	1.45	14.13
MW-111	4 - 14	18.95	10.5	8.45	10.54	8.41	16.64	2.31	10.71	8.24	12.23	6.72	10.73	8.22	11.37	7.58	10.55	8.4
MW-111R	5 - 15	18.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-112	3 - 10	18.16	Dry	Dry	--	--	----	----	----	--	--	--	8.33	9.83	--	--	--	--
MW-112a	4 - 19	17.78	12.52	5.26	12.61	5.17	13.71	4.07	12.77	5.01	13.56	4.22	12.93	4.85	13.01	4.77	12.78	5.0
MW-113	10 - 20	26.16	11.28	14.88	11.15	15.01	11.39	14.77	11.62	14.54	12.01	14.15	11.63	14.53	11.99	14.17	11.41	14.75
MW-114	7 - 17	29.43	11.11	18.32	10.75	18.68	12.42	17.01	12.3	17.13	13.24	16.19	12.21	17.22	13.19	16.24	11.25	18.18
MW-115/115R	10 - 25	27.15	15.85	11.3	15.86	11.29	16.45	10.7	16.72	10.43	18.49	8.66	16.78	10.37	17.8	9.35	16.35	10.8
MW-116	5 - 15	13.45	8.68	4.77	8.77	4.68	8.85	4.6	8.88	4.57	9.09	4.36	9.01	4.44	--	--	8.94	--
MW-117S	5 - 20	21.94	13.52	8.42	13.5	8.44	14.22	7.72	14.6	7.34	14.99	6.95	13.90	8.04	14.67	7.27	14.02	7.92
MW-117T	35 - 45	21.87	13.97	7.9	13.9	7.97	14.67	7.2	14.94	6.93	15.68	6.19	15.27	6.60	15.26	6.61	14.45	7.42
MW-117D	60 - 70	21.78	13.86	7.92	13.81	7.97	14.51	7.27	14.89	6.89	15.61	6.17	14.67	7.11	15.27	6.51	14.3	7.48
MW-118S	3 - 14	15.52	8.34	7.18	8.4	7.12	10	5.52	9.38	6.14	9.64	5.88	8.48	7.04	9.05	6.47	8.41	7.11
MW-118T	39.5 - 49.5	15.30	9.49	5.81	9.53	5.77	9.83	5.47	9.94	5.36	10.35	4.95	9.92	5.38	10.19	5.11	9.73	5.57
MW-118D	70 - 80	15.15	9.3	5.85	9.35	5.8	9.64	5.51	9.8	5.35	10.11	5.04	9.70	5.45	9.99	5.16	9.54	5.61
MW-119S	5 - 20	11.74	4.6	7.14	4.56	7.18	4.91	6.83	4.92	6.82	4.94	6.80	6.08	5.66	4.08	7.66	4.41	7.33
MW-119T	42 - 47	11.67	5.63	6.04	5.78	5.89	5.97	5.7	6.1	5.57	6.52	5.15	4.52	7.15	6.78	4.89	5.85	5.82
MW-120S	5 - 20	12.54	4.06	8.48	4.0	8.54	5.1	7.44	4.57	7.97	5.18	7.36	4.61	7.93	4.01	8.53	4.03	8.51
MW-120D	28 - 38	12.45	2.96	9.49	3.11	9.34	3.26	9.19	3.44	9.01	3.82	8.63	2.90	9.55	3.32	9.13	3.18	9.27
MW-121S	5 - 20	12.44	7.36	5.08	7.41	5.03	9.39	3.05	7.29	5.15	9.21	3.23	7.70	4.74	9.01	3.43	7.68	4.76
MW-121D	32 - 47	12.81	6.83	5.98	6.91	5.9	7.31	5.5	7.27	5.54	7.64	5.17	7.30	5.51	9.64	3.17	7.07	5.74
MW-122	4 - 16	16.42	12.98	3.44	13	3.42	13.03	3.39	12.99	3.43	13.15	3.27	13.17	3.25	11.42	5.0	13.15	3.27
GEO-1	5 - 20	25.88	11.22	14.66	--	--	11.25	14.63	11.4	14.48	12.32	13.56	12.00	13.88	12.14	13.74	11.26	14.62
GEO-2	5 - 20	26.54	11.77	14.77	--	--	12.81	13.73	12.01	14.53	11.73	14.81	11.41	15.13	11.58	14.96	11.88	14.66
GEO-3	5 - 20	25.64	10.71	14.93	--	--	10.97	14.67	--	--	12.05	13.59	11.57	14.07	--	--	--	--
GEO-4	4 - 19	21.69	10.36	11.33	10.34	11.35	11.46	10.23	11.13	10.56	11.60	10.09	11.16	10.53	11.89	9.8	10.56	11.13
GEO-5	5 - 20	20.14	9.42	10.72	9.52	10.62	10.8	9.34	10.21	9.93	10.89	9.25	10.28	9.86	11.79	8.35	9.70	10.44
GEO-6	5 - 20	17.62	7.78	9.84	7.86	9.76	9.11	8.51	8.51	9.11	9.20	8.42	7.91	9.71	10.95	6.67	8.02	9.6
SH-1	9 - 14	29.55	--	--	--	--	----	----	----	----	--	--	--	--	--	--	--	--
SH-2	7 - 14	29.64	--	--	--	--	----	----	----	----	--	--	--	--	--	--	--	--
SH-3	8 - 13	29.66	--	--	--	--	----	----	----	----	--	--	--	--	--	--	--	--
SH-4	11 - 16	29.63	--	--	--	--	----	----	----	----	--	--	--	--	--	--	--	--
SH-5	8 - 13	29.63	--	--	--	--	----	----	----	----	--	--	--	--	--	--	--	--
SH-MW1	10 - 30	24.02	--	--	--	--	----	----	----	----	--	--	--	--	--	--	--	--
SH-MW2	10 - 25	24.27	12.49	11.78	12.46	11.81	13.62	10.65	12.89	11.38	11.83	12.44	12.92	11.35	12.01	12.26	12.63	11.64
SH-MW2R	10 - 23	24.56	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-MW3	10 - 24	22.31	10.68	11.63	10.65	11.66	11.83	10.48	11.21	11.1	13.27	9.04	11.30	11.01	12.49	9.82	10.87	11.44
MW201	11 - 21	27.51	12.76	14.75	12.64	14.87	12.85	14.66	13.94	13.57	13.31	14.2	13.00	14.51	14.64	12.87	13.27	14.24
MW202	10.5 - 20.5	27.82	13.22	14.6	13.12	14.7	12.73	15.09	13.37	14.45	13.68	14.14	13.41	14.41	13.29	14.53	12.82	15
MW203	6 - 18	21.80	12.03	9.77	12	9.8	13.31	8.49	12.68	9.12	13.15	8.65	12.55	9.25	13.02	8.78	12.25	9.55
MW203R	13 - 23	24.97	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW301	5-15	13.24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

- General Notes:**
- ft = feet.
 - bgs = below ground surface.
 - ID = identification.
 - GW = groundwater.
 - NAVD = North American Vertical Datum of 1988.
 - The top of the PVC riser was used as the measuring point for depth to groundwater.
 - "-" = Well not yet installed, abandoned, or not measured.
 - NM = Not measured.

Table 4-3. Groundwater Elevations
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

		Gauging Date:	4/13/09		7/14/09		10/14/09		4/12/10		10/27/10		4/20/11		11/16/11		4/16/12	
Monitoring Well ID	Well Screen Interval (ft bgs)	Elevation of Measuring Point (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)
MW-1	unknown	25.90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	unknown	25.38	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	unknown	25.31	12.28	13.03	12.92	12.39	13.19	12.12	--	--	--	--	--	--	--	--	--	--
MW-101	9 - 19	26.75	11.91	14.84	12.2	14.55	12.37	14.38	11.61	15.14	--	--	11.73	15.02	--	--	12.71	14.04
MW-102	6 - 16	18.89	7.35	11.54	7.85	11.04	7.99	10.9	7.11	11.78	--	--	7.04	11.85	--	--	8.53	10.36
MW-103	6 - 16	19.47	10.57	8.9	11.07	8.4	11.34	8.13	10.47	9.00	--	--	10.39	9.08	--	--	11.79	7.68
MW-104	5 - 15	17.67	7.98	9.69	8.84	17.67	8.83	8.29	8.52	9.15	--	--	9.28	8.39	--	--	10.24	7.43
MW-104R	5 - 15	15.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-105	19 - 29	38.84	20.65	18.19	21.4	17.44	21.8	17.04	19.84	19.00	--	--	20.63	18.21	--	--	--	--
MW-106	9 - 19	26.33	11.49	14.84	overflowing	--	overflowing	--	11.16	15.17	--	--	11.39	14.94	--	--	--	--
MW-107	2 - 12	14.63	4.47	10.16	overflowing	--	overflowing	--	4.31	10.32	--	--	4.43	10.2	--	--	--	--
MW-108	2 - 12	12.74	3.73	9.01	4.37	8.37	4.66	8.08	3.86	8.88	--	--	3.56	9.18	--	--	4.72	8.02
MW-109	3 - 13	24.12	10.4	13.72	11.11	13.01	--	--	9.88	14.24	--	--	10.10	14.02	--	--	12.15	11.97
MW-110	3 - 13	15.58	1.1	14.48	2.88	12.7	2.42	13.16	1.39	14.19	--	--	1.67	13.91	--	--	--	--
MW-111	4 - 14	18.95	10.56	8.39	10.67	8.28	10.41	8.54	10.57	8.38	--	--	10.62	8.33	--	--	11.6	7.35
MW-111R	5 - 15	18.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-112	3 - 10	18.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-112a	4 - 19	17.78	12.63	5.15	12.78	5.0	12.58	5.2	12.62	5.16	12.31	5.47	12.14	5.64	12.30	5.48	12.70	5.08
MW-113	10 - 20	26.16	11.23	14.93	11.56	14.6	11.73	14.43	10.93	15.23	--	--	11.00	15.16	--	--	12.11	14.05
MW-114	7 - 17	29.43	10.97	18.46	12.04	17.39	--	--	10.24	19.19	--	--	10.46	18.97	--	--	13.70	15.73
MW-115/115R	10 - 25	27.15	15.4	11.75	16.58	10.57	17.4	9.75	16.43	10.72	--	--	16.22	10.93	--	--	18.51	8.64
MW-116	5 - 15	13.45	8.87	4.58	8.97	4.48	8.76	4.69	8.85	4.6	--	--	8.32	5.13	--	--	--	--
MW-117S	5 - 20	21.94	14.38	7.56	14.66	7.28	14.75	7.19	13.32	8.62	--	--	14.06	7.88	--	--	9.06	12.88
MW-117T	35 - 45	21.87	14.43	7.44	15.03	6.84	15.26	6.61	13.56	8.31	--	--	14.18	7.69	--	--	15.58	6.29
MW-117D	60 - 70	21.78	14.26	7.52	14.89	6.89	15.13	6.65	13.48	8.3	--	--	14.01	7.77	--	--	15.81	5.97
MW-118S	3 - 14	15.52	8.7	6.82	9.43	6.09	9.01	6.51	8.31	7.21	--	--	8.55	6.97	--	--	9.66	5.86
MW-118T	39.5 - 49.5	15.30	9.64	5.66	9.92	5.38	9.99	5.31	9.49	5.81	--	--	9.33	5.97	--	--	10.30	5
MW-118D	70 - 80	15.15	9.47	5.68	9.74	5.41	9.73	5.42	9.29	5.86	--	--	9.15	6.00	--	--	10.11	5.04
MW-119S	5 - 20	11.74	4.21	7.53	4.47	7.27	4.33	7.41	4.33	7.41	--	--	4.08	7.66	--	--	5.14	6.6
MW-119T	42 - 47	11.67	5.8	5.87	6.04	5.63	6.01	5.66	5.68	5.99	--	--	5.55	6.12	--	--	6.50	5.17
MW-120S	5 - 20	12.54	3.85	8.69	4.31	8.23	3.58	8.96	3.98	8.56	--	--	3.65	8.89	--	--	4.78	7.76
MW-120D	28 - 38	12.45	3.11	9.34	3.31	9.14	3.29	9.16	3.04	9.41	--	--	3.18	9.27	--	--	3.87	8.58
MW-121S	5 - 20	12.44	7.57	4.87	7.62	4.82	7.71	4.73	7.67	4.77	--	--	7.12	5.32	--	--	7.26	5.18
MW-121D	32 - 47	12.81	6.98	5.83	7.27	5.54	7.37	5.44	6.87	5.94	--	--	6.77	6.04	--	--	7.69	5.12
MW-122	4 - 16	16.42	13.16	3.26	13.14	3.28	13.12	3.3	13.09	3.33	13.04	3.38	13.06	3.36	13.16	3.26	13.1	3.32
GEO-1	5 - 20	25.88	11.07	14.81	11.31	14.57	11.54	14.34	17.06	8.82	--	--	10.92	14.96	--	--	--	--
GEO-2	5 - 20	26.54	11.7	14.84	11.99	14.55	12.25	14.29	11.41	15.13	--	--	10.55	15.99	--	--	11.81	14.73
GEO-3	5 - 20	25.64	10.86	14.78	11.48	14.16	11.79	13.85	10.27	15.37	--	--	10.62	15.02	--	--	12.21	13.43
GEO-4	4 - 19	21.69	10.21	11.48	11.00	10.69	--	--	10.26	11.43	--	--	--	--	--	--	11.98	9.71
GEO-5	5 - 20	20.14	9.30	10.84	10.08	10.06	10.44	9.7	9.48	10.66	--	--	9.18	10.96	--	--	11.18	8.96
GEO-6	5 - 20	17.62	7.48	10.14	8.18	9.44	8.66	8.96	7.62	10	--	--	7.63	9.99	--	--	9.54	8.08
SH-1	9 - 14	29.55	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-2	7 - 14	29.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-3	8 - 13	29.66	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-4	11 - 16	29.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-5	8 - 13	29.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-MW1	10 - 30	24.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-MW2	10 - 25	24.27	12.33	11.94	12.77	11.5	13.01	11.26	10.61	13.66	--	--	12.29	11.98	--	--	13.53	10.74
SH-MW2R	10 - 23	24.56	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-MW3	10 - 24	22.31	10.52	11.79	11.12	11.19	11.46	10.85	12.39	9.92	--	--	10.46	11.85	--	--	12.00	10.31
MW201	11 - 21	27.51	12.69	14.82	12.94	14.57	13.09	14.42	12.42	15.09	--	--	12.57	14.94	--	--	13.43	14.08
MW202	10.5 - 20.5	27.82	13.15	14.67	13.33	14.49	13.55	14.27	12.94	14.88	--	--	13.02	14.80	--	--	--	--
MW203	6 - 18	21.80	11.5	10.3	12.29	9.51	12.77	9.03	12.03	9.77	--	--	11.83	9.97	--	--	13.85	7.95
MW203R	13 - 23	24.97	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW301	5-15	13.24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

- General Notes:**
- ft = feet.
 - bgs = below ground surface.
 - ID = identification.
 - GW = groundwater.
 - NAVD = North American Vertical Datum of 1988.
 - The top of the PVC riser was used as the measuring point for depth to groundwater.
 - "-" = Well not yet installed, abandoned, or not measured.
 - NM = Not measured.

Table 4-3. Groundwater Elevations
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

		Gauging Date:	11/12/12		4/23/13		11/18/13		4/30/14		6/11/14		11/18/14		4/1/15		4/17/15	
Monitoring Well ID	Well Screen Interval (ft bgs)	Elevation of Measuring Point (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)
MW-1	unknown	25.90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	unknown	25.38	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	unknown	25.31	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-101	9 - 19	26.75	--	--	12.41	14.34	--	--	12.03	14.72	--	--	--	--	--	--	--	--
MW-102	6 - 16	18.89	--	--	8.01	10.88	--	--	7.68	11.21	--	--	--	--	6.99	11.9	--	--
MW-103	6 - 16	19.47	--	--	11.22	8.25	--	--	10.96	8.51	--	--	--	--	10.43	9.04	--	--
MW-104	5 - 15	17.67	--	--	9.64	8.03	--	--	9.5	8.17	--	--	--	--	8.04	9.63	--	--
MW-104R	5 - 15	15.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-105	19 - 29	38.84	--	--	21.31	17.53	--	--	--	--	--	--	--	--	--	--	--	--
MW-106	9 - 19	26.33	--	--	--	--	--	--	11.71	14.62	--	--	--	--	--	--	--	--
MW-107	2 - 12	14.63	--	--	--	--	--	--	3.61	11.02	--	--	--	--	--	--	--	--
MW-108	2 - 12	12.74	--	--	4.34	8.4	--	--	4.09	8.65	--	--	--	--	3.31	9.43	--	--
MW-109	3 - 13	24.12	--	--	11.37	12.75	--	--	10.79	13.33	--	--	--	--	9.61	14.51	--	--
MW-110	3 - 13	15.58	--	--	--	--	--	--	2.61	12.97	--	--	--	--	0.60	14.98	--	--
MW-111	4 - 14	18.95	--	--	11.01	7.94	--	--	10.96	7.99	--	--	--	--	10.80	8.15	--	--
MW-111R	5 - 15	18.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-112	3 - 10	18.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-112a	4 - 19	17.78	12.72	5.06	12.80	4.98	13.11	4.67	--	--	12.86	4.92	12.39	5.39	--	--	12.86	4.92
MW-113	10 - 20	26.16	--	--	11.73	14.43	--	--	11.42	14.74	--	--	--	--	10.64	15.52	--	--
MW-114	7 - 17	29.43	--	--	12.24	17.19	--	--	12.05	17.38	--	--	--	--	10.06	19.37	--	--
MW-115/115R	10 - 25	27.15	--	--	17.76	9.39	--	--	17.51	9.64	--	--	--	--	16.50	10.65	--	--
MW-116	5 - 15	13.45	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-117S	5 - 20	21.94	--	--	14.39	7.55	--	--	13.63	8.31	--	--	--	--	9.66	12.28	--	--
MW-117T	35 - 45	21.87	--	--	15.19	6.68	--	--	14.78	7.09	--	--	--	--	13.95	7.92	--	--
MW-117D	60 - 70	21.78	--	--	15.09	6.69	--	--	14.71	7.07	--	--	--	--	13.88	7.90	--	--
MW-118S	3 - 14	15.52	--	--	9.41	6.11	--	--	9.01	6.51	--	--	--	--	8.04	7.48	--	--
MW-118T	39.5 - 49.5	15.30	--	--	10.12	5.18	--	--	9.94	5.36	--	--	--	--	9.63	5.67	--	--
MW-118D	70 - 80	15.15	10.03	5.12	10.00	5.15	10.73	4.42	9.82	5.33	--	--	10.20	4.95	9.47	5.68	--	--
MW-119S	5 - 20	11.74	--	--	4.70	7.04	--	--	4.31	7.43	--	--	--	--	4.16	7.58	--	--
MW-119T	42 - 47	11.67	--	--	6.25	5.42	--	--	6.11	5.56	--	--	--	--	5.80	5.87	--	--
MW-120S	5 - 20	12.54	--	--	4.26	8.28	--	--	4.19	8.35	--	--	--	--	3.54	9.00	--	--
MW-120D	28 - 38	12.45	--	--	3.40	9.05	--	--	4.41	8.04	--	--	--	--	3.10	9.35	--	--
MW-121S	5 - 20	12.44	--	--	6.93	5.51	--	--	5.95	6.49	--	--	--	--	6.77	5.67	--	--
MW-121D	32 - 47	12.81	7.55	5.26	7.41	5.4	8.13	4.68	7.35	5.46	--	--	7.27	5.54	7.01	5.80	--	--
MW-122	4 - 16	16.42	13.16	3.26	13.14	3.28	13.12	3.3	13.12	3.30	--	--	13.04	3.38	13.15	3.27	--	--
GEO-1	5 - 20	25.88	--	--	11.50	14.38	--	--	11.19	14.69	--	--	--	--	10.69	15.19	--	--
GEO-2	5 - 20	26.54	--	--	12.19	14.35	--	--	11.99	14.55	--	--	--	--	11.34	15.20	--	--
GEO-3	5 - 20	25.64	--	--	11.57	14.07	--	--	11.10	14.54	--	--	--	--	9.92	15.72	--	--
GEO-4	4 - 19	21.69	--	--	11.29	10.4	--	--	11.09	10.6	--	--	--	--	10.17	11.52	--	--
GEO-5	5 - 20	20.14	--	--	10.45	9.69	--	--	10.25	9.89	--	--	--	--	9.29	10.85	--	--
GEO-6	5 - 20	17.62	--	--	8.56	9.06	--	--	8.30	9.32	--	--	--	--	7.84	9.78	--	--
SH-1	9 - 14	29.55	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-2	7 - 14	29.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-3	8 - 13	29.66	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-4	11 - 16	29.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-5	8 - 13	29.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-MW1	10 - 30	24.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-MW2	10 - 25	24.27	--	--	13.13	11.14	--	--	12.95	11.32	--	--	--	--	12.41	11.86	--	--
SH-MW2R	10 - 23	24.56	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-MW3	10 - 24	22.31	--	--	11.43	10.88	--	--	11.23	11.08	--	--	--	--	10.55	11.76	--	--
MW201	11 - 21	27.51	--	--	13.15	14.36	--	--	12.97	14.54	--	--	--	--	12.40	15.11	--	--
MW202	10.5 - 20.5	27.82	--	--	13.54	14.28	--	--	13.32	14.50	--	--	--	--	12.93	14.89	--	--
MW203	6 - 18	21.80	--	--	13.15	8.65	--	--	12.92	8.88	--	--	--	--	12.05	9.75	--	--
MW203R	13 - 23	24.97	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW301	5-15	13.24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

- General Notes:**
1. ft = feet.
 2. bgs = below ground surface.
 3. ID = identification.
 4. GW = groundwater.
 5. NAVD = North American Vertical Datum of 1988.
 6. The top of the PVC riser was used as the measuring point for depth to groundwater.
 7. "-" = Well not yet installed, abandoned, or not measured.
 8. NM = Not measured.

Table 4-3. Groundwater Elevations
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

		Gauging Date:	11/19/15		4/27/16		11/21/16		4/14/17		11/8/17		1/31/18		4/2/18		11/15/18	
Monitoring Well ID	Well Screen Interval (ft bgs)	Elevation of Measuring Point (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)
MW-1	unknown	25.90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	unknown	25.38	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	unknown	25.31	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-101	9 - 19	26.75	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-102	6 - 16	18.89	--	--	8.02	10.87	--	--	--	--	--	--	7.94	10.95	7.58	11.31	--	--
MW-103	6 - 16	19.47	--	--	11.49	7.98	--	--	--	--	--	--	11.12	8.35	10.81	8.66	--	--
MW-104	5 - 15	17.67	--	--	10.63	7.04	--	--	9.05	8.62	--	--	11.99	5.68	9.21	8.46	--	--
MW-104R	5 - 15	15.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-105	19 - 29	38.84	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-106	9 - 19	26.33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-107	2 - 12	14.63	--	--	4.49	10.14	--	--	4.51	10.12	--	--	4.56	10.07	4.51	10.12	--	--
MW-108	2 - 12	12.74	--	--	4.11	8.63	--	--	3.78	8.96	--	--	4.02	8.72	4.05	8.69	--	--
MW-109	3 - 13	24.12	--	--	11.25	12.87	--	--	9.86	14.26	--	--	11.02	13.10	10.51	13.61	--	--
MW-110	3 - 13	15.58	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-111	4 - 14	18.95	--	--	11.50	7.45	--	--	Dry	Dry	--	--	Dry	Dry	NF	NF	--	--
MW-111R	5 - 15	18.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-112	3 - 10	18.16	--	--	--	--	--	--	6.44	11.72	--	--	--	--	--	--	--	--
MW-112a	4 - 19	17.78	--	--	11.14	6.64	13.12	4.66	12.88	4.90	15.32	2.46	12.85	4.93	--	--	13.09	4.69
MW-113	10 - 20	26.16	--	--	11.65	14.51	--	--	10.83	15.33	--	--	13.90	12.26	11.35	14.81	--	--
MW-114	7 - 17	29.43	--	--	12.45	16.98	--	--	10.70	18.73	--	--	12.89	16.54	11.29	18.14	--	--
MW-115/115R	10 - 25	27.15	--	--	18.23	8.92	--	--	17.33	9.82	--	--	18.17	8.98	17.66	9.49	--	--
MW-116	5 - 15	13.45	--	--	9.34	4.11	--	--	9.18	4.27	--	--	9.22	4.23	9.14	4.31	--	--
MW-117S	5 - 20	21.94	--	--	14.09	7.85	--	--	12.49	9.45	--	--	16.65	5.29	13.07	8.87	--	--
MW-117T	35 - 45	21.87	--	--	15.59	6.28	--	--	14.36	7.51	--	--	17.76	4.11	14.75	7.12	--	--
MW-117D	60 - 70	21.78	--	--	--	--	--	--	12.93	8.85	--	--	12.11	9.67	13.5	8.28	--	--
MW-118S	3 - 14	15.52	--	--	9.30	6.22	--	--	8.37	7.15	--	--	12.17	3.35	8.75	6.77	--	--
MW-118T	39.5 - 49.5	15.30	--	--	10.37	4.93	--	--	9.80	5.5	--	--	12.45	2.85	9.96	5.34	--	--
MW-118D	70 - 80	15.15	11.99	3.16	10.20	4.95	10.42	4.73	9.61	5.54	10.27	4.88	--	--	9.74	5.41	9.23	5.92
MW-119S	5 - 20	11.74	--	--	4.64	7.10	--	--	4.43	7.31	--	--	--	--	4.56	7.18	--	--
MW-119T	42 - 47	11.67	--	--	6.43	5.24	--	--	5.95	5.72	--	--	--	--	6.12	5.55	--	--
MW-120S	5 - 20	12.54	--	--	3.16	9.38	--	--	3.91	8.63	--	--	5.72	6.82	3.97	8.57	--	--
MW-120D	28 - 38	12.45	--	--	3.68	8.77	--	--	3.19	9.26	--	--	6.30	6.15	3.41	9.04	--	--
MW-121S	5 - 20	12.44	--	--	--	--	--	--	7.73	4.71	--	--	7.76	4.68	7.32	5.12	--	--
MW-121D	32 - 47	12.81	8.83	3.98	--	--	7.85	4.96	7.17	5.64	7.75	5.06	7.50	5.31	7.74	5.07	6.79	6.02
MW-122	4 - 16	16.42	13.23	3.19	13.19	3.23	13.21	3.21	13.18	3.24	13.17	3.25	13.19	3.23	13.13	3.29	13.17	3.25
GEO-1	5 - 20	25.88	--	--	11.39	14.49	--	--	10.75	15.13	--	--	--	--	11.11	14.77	--	--
GEO-2	5 - 20	26.54	--	--	12.18	14.36	--	--	11.51	15.03	--	--	--	--	11.83	14.71	--	--
GEO-3	5 - 20	25.64	--	--	--	--	--	--	10.25	15.39	--	--	11.40	14.24	10.79	14.85	--	--
GEO-4	4 - 19	21.69	--	--	11.61	10.08	--	--	10.59	11.1	--	--	11.20	10.49	11.20	10.49	--	--
GEO-5	5 - 20	20.14	--	--	10.94	9.20	--	--	9.81	10.33	--	--	10.44	9.70	10.2	9.94	--	--
GEO-6	5 - 20	17.62	--	--	9.72	7.90	--	--	8.42	9.2	--	--	9.12	8.50	8.67	8.95	--	--
SH-1	9 - 14	29.55	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-2	7 - 14	29.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-3	8 - 13	29.66	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-4	11 - 16	29.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-5	8 - 13	29.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-MW1	10 - 30	24.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-MW2	10 - 25	24.27	--	--	--	--	--	--	--	--	--	--	--	--	12.84	11.43	--	--
SH-MW2R	10 - 23	24.56	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-MW3	10 - 24	22.31	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW201	11 - 21	27.51	--	--	13.15	14.36	--	--	--	--	--	--	15.36	12.15	13.34	14.17	--	--
MW202	10.5 - 20.5	27.82	--	--	13.53	14.29	--	--	--	--	--	--	15.77	12.05	12.86	14.96	--	--
MW203	6 - 18	21.80	--	--	13.93	7.87	--	--	--	--	--	--	15.76	6.04	12.98	8.82	--	--
MW203R	13 - 23	24.97	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW301	5-15	13.24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

- General Notes:**
1. ft = feet.
 2. bgs = below ground surface.
 3. ID = identification.
 4. GW = groundwater.
 5. NAVD = North American Vertical Datum of 1988.
 6. The top of the PVC riser was used as the measuring point for depth to groundwater.
 7. "-" = Well not yet installed, abandoned, or not measured.
 8. NM = Not measured.

Table 4-3. Groundwater Elevations
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

		Gauging Date:	4/15/19		11/22/19		4/13/20		11/18/20		4/12/21		11/30/21		4/12/22		11/29/22	
Monitoring Well ID	Well Screen Interval (ft bgs)	Elevation of Measuring Point (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)
MW-1	unknown	25.90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	unknown	25.38	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	unknown	25.31	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-101	9 - 19	26.75	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-102	6 - 16	18.89	7.21	11.68	--	--	7.37	11.52	--	--	8.13	10.76	--	--	--	--	--	--
MW-103	6 - 16	19.47	7.26	12.21	--	--	10.70	8.77	--	--	11.90	7.57	--	--	--	--	--	--
MW-104	5 - 15	17.67	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-104R	5 - 15	15.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-105	19 - 29	38.84	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-106	9 - 19	26.33	--	--	--	--	--	--	--	--	NM- Flooded	--	--	--	--	--	--	--
MW-107	2 - 12	14.63	4.74	9.89	--	--	4.42	10.21	--	--		4.48	10.15	--	--	--	--	--
MW-108	2 - 12	12.74	3.95	8.79	--	--	3.86	8.88	--	--		4.05	8.69	--	--	--	--	--
MW-109	3 - 13	24.12	10.62	13.5	--	--	10.41	13.71	--	--		11.31	12.81	--	--	--	--	--
MW-110	3 - 13	15.58	--	--	--	--	--	--	--	--	--	1.99	13.59	--	--	--	--	--
MW-111	4 - 14	18.95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-111R	5 - 15	18.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-112	3 - 10	18.16	5.05	13.11	--	--	6.75	11.41	--	--	8.06	10.1	--	--	--	--	--	--
MW-112a	4 - 19	17.78	12.3	5.48	13.00	4.78	12.75	5.03	13.08	4.70	13.05	4.73	12.80	4.98	12.55	5.23	12.81	4.97
MW-113	10 - 20	26.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-114	7 - 17	29.43	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-115/115R	10 - 25	27.15	16.96	10.19	--	--	17.89	9.26	--	--	19.4	7.75	--	--	--	--	--	--
MW-116	5 - 15	13.45	8.35	5.1	--	--	9.17	4.28	--	--	9.51	3.94	--	--	9	4.45	--	--
MW-117S	5 - 20	21.94	9.19	12.75	--	--	12.69	9.25	--	--	13.51	8.43	--	--	12.8	9.14	--	--
MW-117T	35 - 45	21.87	14.46	7.41	--	--	16.06	5.81	--	--	16.35	5.52	--	--	16	5.87	--	--
MW-117D	60 - 70	21.78	11.76	10.02	--	--	10.11	11.67	--	--	16.31	5.47	--	--	15.6	6.18	--	--
MW-118S	3 - 14	15.52	9.84	5.68	--	--	8.85	6.67	--	--	8.95	6.57	--	--	9.1	6.42	--	--
MW-118T	39.5 - 49.5	15.30	9.52	5.78	--	--	10.24	5.06	--	--	10.77	4.53	--	--	10.6	4.7	--	--
MW-118D	70 - 80	15.15	9.31	5.84	10.49	4.66	10.09	5.06	10.65	4.5	10.59	4.56	10.55	4.6	10.2	4.95	10.97	4.18
MW-119S	5 - 20	11.74	4.05	7.69	--	--	3.49	8.25	--	--	4.20	7.54	--	--	4.05	7.69	--	--
MW-119T	42 - 47	11.67	5.86	5.81	--	--	6.20	5.47	--	--	6.85	4.82	--	--	6.7	4.97	--	--
MW-120S	5 - 20	12.54	3.85	8.69	--	--	3.35	9.19	--	--	4.30	8.24	--	--	5	7.54	--	--
MW-120D	28 - 38	12.45	3.21	9.24	--	--	3.93	8.52	--	--	3.81	8.64	--	--	4.5	7.95	--	--
MW-121S	5 - 20	12.44	6.8	5.64	--	--	7.72	4.72	--	--	7.73	4.71	--	--	8	4.44	--	--
MW-121D	32 - 47	12.81	6.94	5.87	7.66	5.15	7.40	5.41	8	4.81	8.05	4.76	8.15	4.66	7.7	5.11	8.40	4.41
MW-122	4 - 16	16.42	12.81	3.61	13.15	3.27	13.01	3.41	13.11	3.31	13.02	3.4	13.1	3.32	12.9	3.52	13.15	3.27
GEO-1	5 - 20	25.88	11.1	14.78	--	--	10.40	15.48	--	--	11.01	14.87	--	--	10.85	15.03	--	--
GEO-2	5 - 20	26.54	12.98	13.56	--	--	11.11	15.43	--	--	12.26	14.28	--	--	12.2	14.34	--	--
GEO-3	5 - 20	25.64	11.06	14.58	--	--	10.36	15.28	--	--	ND-Bott at 11.15	--	--	--	--	--	--	--
GEO-4	4 - 19	21.69	10.72	10.97	--	--	11.41	10.28	--	--		12.41	9.28	--	--	--	--	--
GEO-5	5 - 20	20.14	7.55	12.59	--	--	11.32	8.82	--	--		12.26	7.88	--	--	--	--	--
GEO-6	5 - 20	17.62	8.23	9.39	--	--	11.62	6	--	--		12.21	5.41	--	--	--	--	--
SH-1	9 - 14	29.55	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-2	7 - 14	29.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-3	8 - 13	29.66	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-4	11 - 16	29.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-5	8 - 13	29.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-MW1	10 - 30	24.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-MW2	10 - 25	24.27	12.55	11.72	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-MW2R	10 - 23	24.56	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-MW3	10 - 24	22.31	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW201	11 - 21	27.51	12.92	14.59	--	--	12.00	15.51	--	--	12.69	14.82	--	--	--	--	--	--
MW202	10.5 - 20.5	27.82	13.3	14.52	--	--	12.31	15.51	--	--	12.99	14.83	--	--	12.9	14.92	--	--
MW203	6 - 18	21.80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW203R	13 - 23	24.97	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW301	5-15	13.24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

- General Notes:**
- ft = feet.
 - bgs = below ground surface.
 - ID = identification.
 - GW = groundwater.
 - NAVD = North American Vertical Datum of 1988.
 - The top of the PVC riser was used as the measuring point for depth to groundwater.
 - "-" = Well not yet installed, abandoned, or not measured.
 - NM = Not measured.

Table 4-3. Groundwater Elevations
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

		Gauging Date:	4/17/23		11/7/23		4/1/24		9/20/24		11/14/24		12/13/24		1/20/25		3/6/25	
Monitoring Well ID	Well Screen Interval (ft bgs)	Elevation of Measuring Point (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)
MW-1	unknown	25.90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	unknown	25.38	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	unknown	25.31	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-101	9 - 19	26.75	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-102	6 - 16	18.89	8.18	10.71	--	--	6.91	11.98	--	--	--	--	--	--	--	--	--	--
MW-103	6 - 16	19.47	--	--	--	--	10.49	8.98	--	--	--	--	--	--	--	--	--	--
MW-104	5 - 15	17.67	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-104R	5 - 15	15.82	--	--	--	--	15.8	0.02	14.95	0.87	15	0.82	--	--	14.79	1.03	--	--
MW-105	19 - 29	38.84	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-106	9 - 19	26.33	--	--	--	--	10.45	15.88	--	--	--	--	--	--	--	--	--	--
MW-107	2 - 12	14.63	4.43	10.2	--	--	4.34	10.29	--	--	--	--	--	--	--	--	--	--
MW-108	2 - 12	12.74	4.34	8.4	--	--	3.52	9.22	--	--	--	--	--	--	--	--	--	--
MW-109	3 - 13	24.12	11.49	12.63	--	--	9.75	14.37	--	--	--	--	--	--	--	--	--	--
MW-110	3 - 13	15.58	2.5	13.08	--	--	0.81	14.77	--	--	--	--	--	--	--	--	--	--
MW-111	4 - 14	18.95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-111R	5 - 15	18.22	--	--	--	--	--	--	--	--	--	--	12.59	5.63	--	--	10.4	7.82
MW-112	3 - 10	18.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-112a	4 - 19	17.78	12.67	5.11	12.64	5.14	12.64	5.14	--	--	13.16	4.62	--	--	--	--	--	--
MW-113	10 - 20	26.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-114	7 - 17	29.43	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-115/115R	10 - 25	27.15	19.61	7.54	--	--	18.12	9.03	--	--	--	--	--	--	18.5	8.65	--	--
MW-116	5 - 15	13.45	9.03	4.42	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-117S	5 - 20	21.94	11.19	10.75	--	--	11.62	10.32	--	--	--	--	--	--	--	--	--	--
MW-117T	35 - 45	21.87	16.1	5.77	--	--	15.09	6.78	--	--	--	--	--	--	--	--	--	--
MW-117D	60 - 70	21.78	16.07	5.71	--	--	11.61	10.17	--	--	--	--	--	--	--	--	--	--
MW-118S	3 - 14	15.52	9.17	6.35	--	--	8.01	7.51	--	--	--	--	--	--	--	--	--	--
MW-118T	39.5 - 49.5	15.30	10.6	4.7	--	--	9.91	5.39	--	--	--	--	--	--	--	--	--	--
MW-118D	70 - 80	15.15	10.5	4.65	10.62	4.53	9.75	5.4	--	--	11.19	3.96	--	--	--	--	--	--
MW-119S	5 - 20	11.74	5.1	6.64	--	--	4.07	7.67	--	--	--	--	--	--	--	--	--	--
MW-119T	42 - 47	11.67	6.73	4.94	--	--	5.98	5.69	--	--	--	--	--	--	--	--	--	--
MW-120S	5 - 20	12.54	4.31	8.23	--	--	3.42	9.12	--	--	--	--	--	--	--	--	--	--
MW-120D	28 - 38	12.45	3.81	8.64	--	--	3.06	9.39	--	--	--	--	--	--	--	--	--	--
MW-121S	5 - 20	12.44	7.58	4.86	--	--	4.07	8.37	--	--	--	--	--	--	--	--	--	--
MW-121D	32 - 47	12.81	8.05	4.76	NM	NM	7.17	5.64	--	--	8.70	4.11	--	--	--	--	--	--
MW-122	4 - 16	16.42	13.1	3.32	13.12	3.3	13.02	3.4	--	--	13.18	3.24	--	--	--	--	--	--
GEO-1	5 - 20	25.88	11.16	14.72	--	--	9.91	15.97	--	--	--	--	--	--	--	--	--	--
GEO-2	5 - 20	26.54	12.1	14.44	--	--	10.6	15.94	--	--	--	--	--	--	--	--	--	--
GEO-3	5 - 20	25.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GEO-4	4 - 19	21.69	12.83	8.86	--	--	10.71	10.98	--	--	--	--	--	--	--	--	--	--
GEO-5	5 - 20	20.14	12.79	7.35	--	--	10.44	9.7	--	--	--	--	--	--	--	--	--	--
GEO-6	5 - 20	17.62	12.75	4.87	--	--	10.75	6.87	--	--	--	--	--	--	--	--	--	--
SH-1	9 - 14	29.55	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-2	7 - 14	29.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-3	8 - 13	29.66	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-4	11 - 16	29.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-5	8 - 13	29.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-MW1	10 - 30	24.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-MW2	10 - 25	24.27	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-MW2R	10 - 23	24.56	--	--	--	--	13.54	11.02	--	--	--	--	--	--	--	--	--	--
SH-MW3	10 - 24	22.31	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW201	11 - 21	27.51	13.84	13.67	--	--	11.62	15.89	--	--	--	--	--	--	--	--	--	--
MW202	10.5 - 20.5	27.82	13.2	14.62	--	--	12.11	15.71	--	--	--	--	--	--	--	--	--	--
MW203	6 - 18	21.80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW203R	13 - 23	24.97	--	--	--	--	19.15	5.82	--	--	--	--	--	--	--	--	--	--
MW301	5-15	13.24	--	--	--	--	--	--	--	--	--	--	--	--	9.31	3.93	--	--

- General Notes:**
1. ft = feet.
 2. bgs = below ground surface.
 3. ID = identification.
 4. GW = groundwater.
 5. NAVD = North American Vertical Datum of 1988.
 6. The top of the PVC riser was used as the measuring point for depth to groundwater.
 7. "-" = Well not yet installed, abandoned, or not measured.
 8. NM = Not measured.

Table 4-3. Groundwater Elevations
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

		Gauging Date:	3/18/25		3/19/25		4/21/25		4/25/25	
Monitoring Well ID	Well Screen Interval (ft bgs)	Elevation of Measuring Point (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)
MW-1	unknown	25.90	--	--	--	--	--	--	--	--
MW-2	unknown	25.38	--	--	--	--	--	--	--	--
MW-3	unknown	25.31	--	--	--	--	--	--	--	--
MW-101	9 - 19	26.75	--	--	--	--	--	--	--	--
MW-102	6 - 16	18.89	--	--	--	--	7.65	11.24	--	--
MW-103	6 - 16	19.47	--	--	--	--	11.2	8.27	--	--
MW-104	5 - 15	17.67	--	--	--	--	--	--	--	--
MW-104R	5 - 15	15.82	--	--	--	--	14.85	0.97	--	--
MW-105	19 - 29	38.84	--	--	--	--	--	--	--	--
MW-106	9 - 19	26.33	--	--	11.14	15.19	11.43	14.9	--	--
MW-107	2 - 12	14.63	--	--	--	--	4.49	10.14	--	--
MW-108	2 - 12	12.74	--	--	--	--	3.89	8.85	--	--
MW-109	3 - 13	24.12	10.93	13.19	--	--	10.65	13.47	--	--
MW-110	3 - 13	15.58	--	--	--	--	0.92	14.66	--	--
MW-111	4 - 14	18.95	--	--	--	--	--	--	--	--
MW-111R	5 - 15	18.22	--	--	--	--	10.37	7.85	--	--
MW-112	3 - 10	18.16	--	--	--	--	--	--	--	--
MW-112a	4 - 19	17.78	--	--	--	--	--	--	12.39	5.39
MW-113	10 - 20	26.16	--	--	--	--	--	--	--	--
MW-114	7 - 17	29.43	--	--	--	--	--	--	--	--
MW-115/115R	10 - 25	27.15	--	--	--	--	19.1	8.05	--	--
MW-116	5 - 15	13.45	--	--	--	--	8.71	4.74	--	--
MW-117S	5 - 20	21.94	--	--	--	--	9.89	12.05	--	--
MW-117T	35 - 45	21.87	--	--	--	--	15.89	5.98	--	--
MW-117D	60 - 70	21.78	--	--	--	--	16.03	5.75	--	--
MW-118S	3 - 14	15.52	--	--	--	--	8.86	6.66	--	--
MW-118T	39.5 - 49.5	15.30	--	--	--	--	10.43	4.87	--	--
MW-118D	70 - 80	15.15	--	--	--	--	10.26	4.89	--	--
MW-119S	5 - 20	11.74	--	--	--	--	4.64	7.1	--	--
MW-119T	42 - 47	11.67	--	--	--	--	6.51	5.16	--	--
MW-120S	5 - 20	12.54	--	--	--	--	4.04	8.5	--	--
MW-120D	28 - 38	12.45	--	--	--	--	3.6	8.85	--	--
MW-121S	5 - 20	12.44	--	--	--	--	7.65	4.79	--	--
MW-121D	32 - 47	12.81	--	--	--	--	7.72	5.09	--	--
MW-122	4 - 16	16.42	--	--	--	--	13.12	3.3	--	--
GEO-1	5 - 20	25.88	--	--	--	--	10.9	14.98	--	--
GEO-2	5 - 20	26.54	--	--	--	--	11.64	14.9	--	--
GEO-3	5 - 20	25.64	--	--	--	--	--	--	--	--
GEO-4	4 - 19	21.69	11.63	10.06	--	--	11.85	9.84	--	--
GEO-5	5 - 20	20.14	11.11	9.03	--	--	11.65	8.49	--	--
GEO-6	5 - 20	17.62	--	--	11.08	6.54	11.38	6.24	--	--
SH-1	9 - 14	29.55	--	--	--	--	--	--	--	--
SH-2	7 - 14	29.64	--	--	--	--	--	--	--	--
SH-3	8 - 13	29.66	--	--	--	--	--	--	--	--
SH-4	11 - 16	29.63	--	--	--	--	--	--	--	--
SH-5	8 - 13	29.63	--	--	--	--	--	--	--	--
SH-MW1	10 - 30	24.02	--	--	--	--	--	--	--	--
SH-MW2	10 - 25	24.27	--	--	--	--	--	--	--	--
SH-MW2R	10 - 23	24.56	--	--	--	--	14.12	10.44	--	--
SH-MW3	10 - 24	22.31	--	--	--	--	--	--	--	--
MW201	11 - 21	27.51	--	--	--	--	12.6	14.91	--	--
MW202	10.5 - 20.5	27.82	--	--	--	--	12.98	14.84	--	--
MW203	6 - 18	21.80	--	--	--	--	--	--	--	--
MW203R	13 - 23	24.97	--	--	--	--	19.3	5.67	--	--
MW301	5-15	13.24	--	--	--	--	4.63	8.61	--	--

- General Notes:**
1. ft = feet.
 2. bgs = below ground surface.
 3. ID = identification.
 4. GW = groundwater.
 5. NAVD = North American Vertical Datum of 1988.
 6. The top of the PVC riser was used as the measuring point for depth to groundwater.
 7. "--" = Well not yet installed, abandoned, or not measured.
 8. NM = Not measured.

Table 4-4. Chemical Testing Results - GLX Groundwater Sampling
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

Sample Location:			KE-114		KE-115		KE-116		KE-117			MW-5R	WashSW ^(b)	KE-202D	KE-202S	KE-204	KE-205	KE-206	KE-207	KE-208	KE209	KE-210	GLC-WASH-MW-4	GLC-WASH-MW-2
Sample Name:			KE-114	KE-114	KE-115	KE-115	KE-116	KE-116	KE-117	KE-117 ^(a)	KE-117	MW-5R	WashSW ^(b)	KE-202D	KE-202S	KE-204	KE-205	KE-206	KE-207	KE-208	KE209	KE-210	GLC-WASH-MW-4-082520	GLC-WASH-MW-2-082520
Well Screen Interval (ft bgs):			5 to 30	5 to 30	5 to 30	5 to 30	5 to 30	5 to 30	5 to 20	5 to 20	5 to 20	5 to 30	Vac-Ex	~25 to 35	5 to 20	15 to 25	9.5 to 19.5	10 to 21	8 to 18	4 to 14	9 to 19	8.5 to 18.5	15-30	15-30
Sample Date:			9/27/12	2/6/14	9/27/12	2/6/14	9/27/12	2/6/14	9/27/12	2/6/14	4/9/14	2/6/14	2/6/14	4/8/14	4/8/14	4/14/14	4/15/14	4/14/14	4/15/14	4/14/14	4/15/14	4/15/14	8/25/20	8/25/20
Collected By:			Kleinfelder	Kleinfelder	Kleinfelder	Kleinfelder	Kleinfelder	Kleinfelder	Kleinfelder	Kleinfelder	Kleinfelder	Kleinfelder	Kleinfelder	Kleinfelder	Kleinfelder	Kleinfelder	Kleinfelder	Kleinfelder	Kleinfelder	Kleinfelder	Kleinfelder	Kleinfelder	TRC	TRC
Analyte	Method	Units																						
Volatile Organic Compounds (VOCs)	SW-846 8260C	µg/l																						
Acetone			< 10	< 10	< 10	< 10	< 10	< 10	56	< 10	< 20	< 10	< 10	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	NT	NT
Benzene			< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	3.8	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NT	NT
Carbon disulfide			< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	73	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NT	NT
1,1-Dichloroethane			< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	12	< 1.0	< 1.0	4.4	< 1.0	< 1.0	3.4	< 1.0	6.0	< 1.0	< 1.0	< 1.0	1000	NT	NT
1,1-Dichloroethylene			< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	8.0	< 1.0	< 1.0	1.8	< 1.0	< 1.0	2.6	< 1.0	4.6	< 1.0	< 1.0	< 1.0	790	NT	NT
cis-1,2-Dichloroethylene			< 1.0	< 1.0	1.8	1.0	< 1.0	< 1.0	< 5.0	410	2.8	< 1.0	26	12	< 0.40	83	< 1.0	89	< 1.0	1.2	< 1.0	8.4	<1.0	<1.0
Ethylbenzene			< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	7.2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NT	NT
Methyl tert-butyl ether			< 1.0	< 1.0	1.4	2.4	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	71	NT	NT
Tetrachloroethylene (PCE)			< 1.0	1.1	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	760	4.3	< 1.0	2000	33	< 1.0	14000	1.0	12000	2.5	73	< 1.0	14000	11	11
Tetrahydrofuran			< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 10	< 2.0	< 2.0	< 2.0	3.3	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	NT	NT
Toluene			< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	2.8	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NT	NT
1,1,1-Trichloroethane (TCA)			< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	11	< 1.0	< 1.0	13	< 1.0	< 1.0	16	< 1.0	35.0	< 1.0	< 1.0	< 1.0	860	NT	NT
1,1,2-Trichloroethane			< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.8	NT	NT
Trichloroethylene (TCE)			< 1.0	< 1.0	1.2	< 1.0	< 1.0	< 1.0	< 5.0	150	1.2	< 1.0	38	5.0	< 1.0	81.0	< 1.0	86.0	< 1.0	2.0	< 1.0	24000	1.6	<1.0
1,2,4-Trimethylbenzene			< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	1.1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NT	NT
Vinyl chloride			< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 10	19	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	3.6	<1.0	<1.0
m,p-Xylene			< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 10	< 2.0	< 2.0	< 2.0	37	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	NT	NT
o-Xylene			< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0	19	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	NT	NT

- General Notes:**
- Analytes detected in at least one sample are reported here. For a complete list of analytes refer to the laboratory data reports.
 - ft bgs = feet below ground surface.
 - µg/l = micrograms per liter.
 - "<" = The analyte was not detected at a concentration above the specified reporting limit.

- Footnote:**
- (a) The groundwater sample from KE-117 on February 6, 2014 was collected during overpumping of the well to simulate construction dewatering conditions and was not collected via low flow sampling techniques.
- (b) WashSW was a grab sample collected from the base of an open excavation within Washington Street.

Table 5-1 - Chemical Testing Results - Sub-Slab Soil Vapor (97 Franklin Street)
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

Sample Location: Sample Name: Sample Date: Units: Residential Sub-Slab Soil Gas Screening Values (µg/m3)			97 Franklin Street											
			97FRANK-SS1 6/30/2007		97FRANK-SS2 6/30/2007		97FRANK-SS1 5/24/2024		97FRANK-SS2 5/24/2024		97FRANK-SS1 2/19/2025		97FRANK-SS2 2/19/2025	
			µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
Analyte	Method													
Volatile Organic Compounds (VOCs)	TO-15													
Carbon tetrachloride		38	0.82 J	0.13 J	< 0.53	< 0.20	NT	NT	NT	NT	NT	NT	NT	NT
Tetrachloroethene		98	34	5.0	86.8	12.8	1.31	0.193	6.16	0.909	21.0	3.10	1.04	0.153
1,1,1-Trichloroethane		210	< 1.1	< 0.20	1.5	0.27	<0.109	<0.020	0.136	0.025	<0.109	<0.020	<0.109	<0.020
Trichloroethylene		28	<1.1	<0.20	<1.1	<0.20	<0.107	<0.020	0.150	0.028	0.113	0.021	0.269	0.050

General Notes:

1. Analytes detected above the laboratory reporting limit are reported here. For a complete list of analytes see the laboratory data sheets.
2. µg/m3 = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. < = The analyte was not detected at a concentration above the specified laboratory reporting limit.
5. NT = Not tested for the analyte
6. Residential Sub-Slab Soil Gas Screening Values taken from the Massachusetts Department of Environmental Protection (MassDEP)
"Vapor Intrusion Guidance: Site Assessment, Mitigation and Closure" dated October 2016.

Qualifying Note:

- J The reported result is below the laboratory reporting limit and is estimated.

Table 5-2 - Chemical Testing Results - Sub-Slab Soil Vapor (156 Glen Street)
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

			Sample Location: 156 Glen Street			
			Sample Name: 045162-156 GLEN-SS2		045162-156GLEN-SV2	
			Sample Date: 3/15/2007		2/19/2025	
			Units: $\mu\text{g}/\text{m}^3$ ppbv		$\mu\text{g}/\text{m}^3$ ppbv	
Analyte	Method	Residential Sub-Slab Soil Gas Screening Values ($\mu\text{g}/\text{m}^3$)				
Volatile Organic Compounds (VOCs)	TO-15					
Tetrachloroethylene (PCE)		98	<1.4	<0.20	1.93	0.284
1,1,1-Trichloroethane		210	10	1.9	<0.109	<0.020
Trichloroethylene (TCE)		28	<1.1	<0.20	0.145	0.027

General Notes:

1. Analytes detected above the laboratory reporting limit are reported here. For a complete list of analytes see the laboratory data sheets.
2. $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. < = The analyte was not detected at a concentration above the specified laboratory reporting limit.
5. Residential Sub-Slab Soil Gas Screening Values taken from the Massachusetts Department of Environmental Protection (MassDEP) "Vapor Intrusion Guidance: Site Assessment, Mitigation and Closure" dated October 2016.

Table 5-3 - Summary of Sub-Slab Soil Vapor Testing Results (10 Morton Street)
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

Sample Location: Sample Name: Sample Date: Collected by: Units:			Pre-Renovation																	
			10 Morton Street																	
			10Mort- SG1		10MORT-SV1		10MORT-SV2		10MORT-SV3		10MORT-SV4		10MORT-SV1		10MORT-SV2		10MORT-SV3		10MORT-SV4	
			5/9/2007		3/8/2023		3/8/2023		3/8/2023		3/8/2023		3/31/2023		3/31/2023		3/31/2023		3/31/2023	
			GEI		GEI		GEI		GEI		GEI		GEI		GEI		GEI		GEI	
			µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
Analyte	Method	Residential Sub-Slab Soil Gas Screening Values (µg/m ³)																		
Volatile Organic Compounds (VOCs)																				
cis-1,2-Dichloroethylene (cis-1,2-DCE)	TO-15	56	<0.79	<0.20	0.083	0.021	0.115	0.029	<0.079	<0.020	<0.079	<0.020	<0.40	<0.10	<0.40	<0.10	<0.40	<0.10	<0.40	<0.10
trans-1,2-Dichloroethylene (trans-1,2-DCE)		56	<0.79	<0.20	<0.079	<0.020	<0.079	<0.020	<0.079	<0.020	<0.079	<0.020	<0.40	<0.10	<0.40	<0.10	<0.40	<0.10	<0.40	<0.10
Tetrachloroethylene (PCE)		98	4.0	0.59	1.06	0.156	1.32	0.194	0.183	0.027	0.292	0.043	<0.68	<0.10	<0.68	<0.10	<0.68	<0.10	<0.68	<0.10
1,1,1-Trichloroethane		210	1.2	0.22	<0.109	<0.020	<0.109	<0.020	<0.109	<0.020	<0.109	<0.020	<0.55	<0.10	<0.55	<0.10	<0.55	<0.10	<0.55	<0.10
Trichloroethylene (TCE)		28	<1.1	<0.20	<0.107	<0.020	0.258	0.048	<0.107	<0.020	<0.107	<0.020	<0.54	<0.10	<0.54	<0.10	<0.54	<0.10	<0.54	<0.10

General Notes

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. Concentrations in Bold exceed the Residential Sub-Slab Soil Gas Screening Values.

Table 5-3 - Summary of Sub-Slab Soil Vapor Testing Results (10 Morton Street)
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

Sample Location: Sample Name: Sample Date: Collected by: Units:			Pre-Renovation 10 Morton Street								Post-Renovation 10 Morton Street							
			10MORT-SV1 4/24/2023 GEI		10MORT-SV2 4/24/2023 GEI		10MORT-SV3 4/24/2023 GEI		10MORT-SV4 4/24/2023 GEI		10MORT-SV5 10/9/2024 GEI		10MORT-SV6 10/9/2024 GEI		10MORT-SV5 3/18/2025 GEI		10MORT-SV6 3/18/2025 GEI	
			µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
Analyte	Method	Residential Sub-Slab Soil Gas Screening Values (µg/m ³)																
Volatile Organic Compounds (VOCs)	TO-15																	
cis-1,2-Dichloroethylene (cis-1,2-DCE)		56	<0.079	<0.020	<0.079	<0.020	<0.079	<0.020	<0.079	<0.020	0.153	0.039	0.107	0.027	<0.079	<0.020	<0.079	<0.020
trans-1,2-Dichloroethylene (trans-1,2-DCE)		56	<0.079	<0.020	<0.079	<0.020	<0.079	<0.020	<0.079	<0.020	336	84.7	291	63.0	12.8	3.24	13.8	3.48
Tetrachloroethylene (PCE)		98	0.353	0.052	0.407	0.060	1.22	0.180	0.285	0.042	12.6	1.86	16.3	2.40	1.17	0.172	5.78	0.853
1,1,1-Trichloroethane		210	<0.109	<0.020	<0.109	<0.020	<0.109	<0.020	<0.109	<0.020	<0.201	<0.037	<0.109	<0.020	<0.109	<0.020	<0.109	<0.020
Trichloroethylene (TCE)		28	<0.107	<0.020	<0.107	<0.020	<0.107	<0.020	<0.107	<0.020	0.228	0.042	<0.107	<0.020	<0.107	<0.020	<0.107	<0.020

General Notes

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. Concentrations in Bold exceed the Residential Sub-Slab Soil Gas Screening Values.

Table 5-4 - Chemical Testing Results - Sub-Slab Soil Vapor (21 Morton Street)
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

Sample Location: Sample Name: Sample Date: Collected by: Units:			21 Morton Street							
			045162-21 Mort-SS1A		045162-21 Mort-SS2A		045163-21MORT-SV1		045163-21MORT-SV2	
			3/28/07		3/28/07		2/19/25		2/19/25	
			GEI		GEI		GEI		GEI	
Analyte	Method	Residential Sub-Slab Soil Gas Screening Values (µg/m3)	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
Volatile Organic Compounds (VOCs)	TO-15									
Tetrachloroethylene (PCE)		98	3.1	0.45	14	2.0	2.28	0.336	4.73	0.698
1,1,1-Trichloroethane		210	0.65 J	0.12 J	154	28.2	0.671	0.123	15.4	2.82

General Notes:

1. Analytes detected above the laboratory reporting limit are reported here. For a complete list of analytes see the laboratory data sheets.
2. µg/m3 = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. < = The analyte was not detected at a concentration above the specified laboratory reporting limit.
5. Residential Sub-Slab Soil Gas Screening Values taken from the Massachusetts Department of Environmental Protection (MassDEP)
"Vapor Intrusion Guidance: Site Assessment, Mitigation and Closure" dated October 2016.

Qualifying Note:

- J The reported result is below the laboratory reporting limit and is estimated.

Table 5-5. Chemical Testing Results - Sub Slab Soil Vapor (31 Tufts Street)
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

Sample Property: Sample Name: Sample Date: Collected By: Vent Status:				31 Tufts Street							
				31TUFT-SV1				31TUFT-SV2			
				10/17/2023	1/31/2024	9/6/2024	2/19/2025	10/27/2023	1/31/2024	9/6/2024	2/19/2025
				GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI
				Open	Open	Open	Closed	Open	Open	Open	Closed
	Method	Units	Residential Sub-Slab Soil Gas Screening Values (µg/m3)								
Volatile Organic Compounds (VOCs)	TO-15 SIM	µg/m ³									
1,1-Dichloroethane			56	<0.162	<0.081	0.356	<0.081	<0.081	<0.081	0.546	<0.081
1,1-Dichloroethene			56	<0.159	<0.079	0.174	<0.079	<0.079	<0.079	<0.079	<0.079
cis-1,2-Dichloroethene			56	<0.159	<0.079	<0.079	<0.079	<0.079	0.270	0.083	<0.079
trans-1,2-Dichloroethene			56	<0.159	<0.079	0.083	<0.079	0.119	<0.079	<0.079	<0.079
Tetrachloroethene			98	58.7	31.5	94.9	31.2	59.1	77.3	61.4	47.9
1,1,2,2-Tetrachloroethane			2.8	<0.275	<0.137	<0.137	<0.137	1.4	<0.137	<0.137	<0.137
1,1,1-Trichloroethane			210	2.87	0.786	7.47	0.393	8.95	9.82	14.60	3.24
Trichloroethene			28	1.38	<0.107	2.09	0.478	2.41	2.42	4.58	1.55

General Notes

1. Analytes detected above the laboratory reporting limit are reported here. For a complete list of analytes see the laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. Residential Screening Values are cited from "Vapor Intrusion Guidance WSC#16-435" from the Massachusetts Department of Environmental Protection dated October 2016.
4. During the February 2025 sampling the vent pipe was closed for one week prior to sampling.

Table 5-6 - Chemical Testing Results - Sub-Slab Soil Vapor (103 Washington Street)
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

				103 Washington Street									
				103Wash-SV1									
				5/10/2023		7/6/2023		3/5/2024		12/4/2024		2/11/2025	
Location Name: Sample Name: Sample Date: Units:				µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
Analyte	Method	Residential Sub-Slab Soil Gas Screening Values (µg/m ³)	Commercial Sub-Slab Soil Gas Screening Values (µg/m ³)										
Volatile Organic Compounds (VOCs)	TO-15												
1,1-Dichloroethane		56	50000	<0.081	<0.020	<0.081	<0.020	<0.081	<0.020	<0.081	<0.020	<0.081	<0.020
1,1-Dichloroethylene		56	12000	<0.079	<0.020	<0.079	<0.020	<0.079	<0.020	<0.079	<0.020	<0.079	<0.020
cis-1,2-Dichloroethylene		56	370	1.95	0.493	2.32	0.585	<0.079	<0.020	<0.079	<0.020	<0.079	<0.020
trans-1,2-Dichloroethylene		56	3700	1.17	0.295	2.39	0.603	<0.079	<0.020	<0.079	<0.020	0.194	0.049
Tetrachloroethylene (PCE)		98	290	28.5	4.21	51.5	7.60	0.210	0.031	2.87	0.423	1.36	0.201
1,1,1-Trichloroethane		210	310000	<0.109	<0.020	0.115	0.021	<0.109	<0.020	0.115	0.021	<0.109	<0.020
Trichloroethylene (TCE)		28	120	9.46	1.76	15.7	2.92	<0.107	<0.020	0.333	0.062	0.193	0.036

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. < = The analyte was not detected at a concentration above the specified laboratory reporting limit.
5. Residential Sub-Slab Soil Gas Screening Values taken from the Massachusetts Department of Environmental Protection (MassDEP) "Vapor Intrusion Guidance: Site Assessment, Mitigation and Closure" dated October 2016.
6. Commercial Sub-Slab Soil Gas Screening Values taken from the Massachusetts Department of Environmental Protection (MassDEP) "Vapor Intrusion Guidance: Site Assessment, Mitigation and Closure" dated October 2016.

Table 5-6 - Chemical Testing Results - Sub-Slab Soil Vapor (103 Washington Street)
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

				103 Washington Street									
				103Wash-SV2									
				5/10/2023		7/6/2023		3/5/2024		12/4/2024		2/11/2025	
				µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
Analyte	Method	Residential Sub-Slab Soil Gas Screening Values (µg/m ³)	Commercial Sub-Slab Soil Gas Screening Values (µg/m ³)										
Volatile Organic Compounds (VOCs)	TO-15												
1,1-Dichloroethane		56	50000	<0.081	<0.020	<0.081	<0.020	<0.081	<0.020	0.125	0.031	<0.081	<0.020
1,1-Dichloroethylene		56	12000	<0.079	<0.020	0.107	0.027	<0.079	<0.020	<0.079	<0.020	<0.079	<0.020
cis-1,2-Dichloroethylene		56	370	9.48	2.39	19.2	4.83	12.2	3.07	6.94	1.75	13.9	3.50
trans-1,2-Dichloroethylene		56	3700	6.66	1.68	7.41	1.87	2.24	0.565	1.38	0.347	1.94	0.489
Tetrachloroethylene (PCE)		98	290	189	27.9	188	27.7	40.9	6.0	60.7	8.95	33.8	4.98
1,1,1-Trichloroethane		210	310000	0.175	0.032	0.278	0.051	<0.109	<0.020	0.218	0.040	<0.109	<0.020
Trichloroethylene (TCE)		28	120	98.3	18.3	130	24.1	37.6	7.00	28.9	5.37	26.8	4.98

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. < = The analyte was not detected at a concentration above the specified laboratory reporting limit.
5. Residential Sub-Slab Soil Gas Screening Values taken from the Massachusetts Department of Environmental Protection (MassDEP) "Vapor Intrusion Guidance: Site Assessment, Mitigation and Closure" dated October 2016.
6. Commercial Sub-Slab Soil Gas Screening Values taken from the Massachusetts Department of Environmental Protection (MassDEP) "Vapor Intrusion Guidance: Site Assessment, Mitigation and Closure" dated October 2016.

Table 5-7 - Chemical Testing Results - Sub-Slab Soil Vapor (105 Washington Street)
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

				105 Washington Street													
				105Wash-SV1		105Wash-SV2		105Wash-SV2		105Wash-SV2		105Wash-SV2		105Wash-SV2		105Wash-SV2	
				8/4/2021		8/4/2021		3/15/2022		2/15/2023		5/10/2023		12/4/2024		2/11/2025	
				Units:													
Analyte	Method	Residential Sub-Slab Soil Gas Screening Values (µg/m ³)	Commercial Sub-Slab Soil Gas Screening Values (µg/m ³)	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
Volatile Organic Compounds (VOCs)	TO-15																
cis-1,2-Dichloroethylene		56	370	<0.793	<0.200	<0.793	<0.200	<0.793	<0.200	<0.079	<0.020	<0.079	<0.020	0.091	0.023	<0.079	<0.020
trans-1,2-Dichloroethylene		0.8	53	<0.793	<0.200	<0.793	<0.200	<0.793	<0.200	<0.079	<0.020	<0.079	<0.020	<0.079	<0.020	0.210	0.053
Tetrachloroethylene (PCE)		98	290	132	19.5	110	16.2	4.69	0.691	0.658	0.097	1.86	0.274	1.20	0.177	0.420	0.062
1,1,2-Trichloroethane		10	50	<1.09	<0.200	<1.09	<0.200	<1.09	<0.200	<0.109	<0.020	<0.109	<0.020	0.115	0.021	<0.109	<0.020
Trichloroethylene (TCE)		28	120	8.44	1.57	8.97	1.67	<1.07	<0.200	<0.107	<0.020	0.215	0.04	0.263	0.049	<0.107	<0.020

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. "<" = The analyte was not detected at a concentration above the specified laboratory reporting limit.
5. Residential Sub-Slab Soil Gas Screening Values taken from the Massachusetts Department of Environmental Protection (MassDEP) "Vapor Intrusion Guidance: Site Assessment, Mitigation and Closure" dated October 2016.
6. Commercial Sub-Slab Soil Gas Screening Values taken from the Massachusetts Department of Environmental Protection (MassDEP) "Vapor Intrusion Guidance: Site Assessment, Mitigation and Closure" dated October 2016.

Table 5-8 - Chemical Testing Results - Indoor Air (84 Franklin Street)
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

			Sample Location: 84 Franklin Street					
			Sample Name: 84-FRANK-B		84-FRANK-F1		84-FRANK-F2	
			Sample Date: 5/7/25		5/7/25		5/7/25	
			Units: $\mu\text{g}/\text{m}^3$ ppbv		$\mu\text{g}/\text{m}^3$ ppbv		$\mu\text{g}/\text{m}^3$ ppbv	
Analyte	Method	MassDEP Residential Threshold Values ($\mu\text{g}/\text{m}^3$)						
Volatile Organic Compounds (VOCs)	TO-15							
Tetrachloroethylene (PCE)		1.4	0.176	0.059	0.400	0.059	0.902	0.133
trans-1,2-Dichloroethene		0.8	0.131	0.020	0.079	0.020	<0.079	<0.020

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. NT= Not tested
5. NS= No standard established
6. MassDEP = Massachusetts Department of Environmental Protection
7. Residential Threshold Values for indoor air taken from the Massachusetts Department of Environmental Protection (MassDEP) Vapor Intrusion Guidance: Site Assessment, Mitigation and Closure dated October 2016.

**Table 5-9 - Chemical Testing Results - Pre- and Post-EPMM Indoor Air
(91-93 Franklin Street)**

Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

			91-93 Franklin Street pre-EPMM				91-93 Franklin Street post-EPMM							
			93 Franklin-1		93 Franklin-B		91-93 FRANK-1		91-93 FRANK-B		91-93FRAN-1		91-93FRAN-B	
			2/14/07		2/14/07		4/8/09		4/8/09		3/24/10		3/24/10	
			µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
Analyte	Method	MassDEP Residential Threshold Values (µg/m ³)												
Volatile Organic Compounds (VOCs)	TO-15													
Tetrachloroethylene (PCE)		1.4	0.95 J	0.14 J	3.5	0.52	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. EPMM = Exposure Pathway Mitigation Measure.
5. NT= Not tested
6. NS= No standard established
7. MassDEP = Massachusetts Department of Environmental Protection
8. Residential Threshold Values for indoor air taken from the Massachusetts Department of Environmental Protection (MassDEP) Vapor Intrusion Guidance: Site Assessment, Mitigation and Closure dated October 2016.
- 9.. Values in bold exceed the applicable MassDEP Residential Threshold Values.

Qualifying Note:

- J The reported result is below the laboratory reporting limit and is estimated.

**Table 5-9 - Chemical Testing Results - Pre- and Post-EPMM Indoor Air
(91-93 Franklin Street)**

Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

Sample Location: Sample Name: Sample Date: Units:			91-93 Franklin Street post-EPMM (continued)									
			91-93FRAN-1 12/7/10		91-93FRAN-B 12/7/2010		91-93FRAN-1 2/2/11		91-93FRAN-B 2/2/2011		91-93FRAN-1 3/2/12	
			µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
Analyte	Method	MassDEP Residential Threshold Values (µg/m ³)										
Volatile Organic Compounds (VOCs)	TO-15											
Tetrachloroethylene (PCE)		1.4	<1.4	<0.20	<1.4	<0.20	<1.4	<0.20	<1.4	<0.20	<1.4	<0.20

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. EPMM = Exposure Pathway Mitigation Measure.
5. NT= Not tested
6. NS= No standard established
7. MassDEP = Massachusetts Department of Environmental Protection
8. Residential Threshold Values for indoor air taken from the Massachusetts Department of Environmental Protection (MassDEP) Vapor Intrusion Guidance: Site Assessment, Mitigation and Closure dated October 2016.
- 9.. Values in bold exceed the applicable MassDEP Residential Threshold Values.

Qualifying Note:

- J The reported result is below the laboratory reporting limit and is estimated.

**Table 5-9 - Chemical Testing Results - Pre- and Post-EPMM Indoor Air
(91-93 Franklin Street)**

Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

			91-93 Franklin Street post-EPMM (continued)							
			91-93FRAN-B		93FRAN-1		91FRAN-1		93FRAN-B	
			3/2/2012		2/28/25		2/28/25		2/28/25	
			µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
Analyte	Method	MassDEP Residential Threshold Values (µg/m ³)								
Volatile Organic Compounds (VOCs)	TO-15									
Tetrachloroethylene (PCE)		1.4	<1.4	<0.20	0.183	0.027	0.163	0.024	0.156	0.023

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. EPMM = Exposure Pathway Mitigation Measure.
5. NT= Not tested
6. NS= No standard established
7. MassDEP = Massachusetts Department of Environmental Protection
8. Residential Threshold Values for indoor air taken from the Massachusetts Department of Environmental Protection (MassDEP) Vapor Intrusion Guidance: Site Assessment, Mitigation and Closure dated October 2016.
- 9.. Values in bold exceed the applicable MassDEP Residential Threshold Values.

Qualifying Note:

- J The reported result is below the laboratory reporting limit and is estimated.

Table 5-10 - Chemical Testing Results - Indoor Air (97 Franklin Street)

Phase V Status Report No. 28 and Remedial Monitoring Report No. 43

50 Tufts Street

Somerville, Massachusetts

Sample Location: Sample Name: Sample Date: Units:			97 Franklin Street															
			97FRAN-1 9/29/07		97FRAN-B 9/29/07		97FRAN-1 2/21/08		97FRAN-B 2/21/08		97FRAN-1 7/24/08		97FRAN-B 7/24/08		97FRAN-1 1/14/09		97FRAN-B 1/14/09	
			µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
			µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
Analyte	Method	MassDEP Residential Threshold Values (µg/m ³)																
Volatile Organic Compounds (VOCs)	TO-15																	
1,2-Dichloroethane		0.09	< 0.81	< 0.20	< 0.81	< 0.20	0.69 J	0.17 J	< 0.81	< 0.20	11	2.6	0.81	0.20	< 0.81	< 0.20	< 0.81	< 0.20
Carbon Tetrachloride		0.54	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	0.69 J	0.11 J	0.69 J	0.11 J	0.63 J	0.10 J	0.75 J	0.12 J
Tetrachloroethylene (PCE)		1.4	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	1.0 J	0.15 J	< 1.4	< 0.20	1.3 J	0.19 J	< 1.4	< 0.20	0.81 J	0.12 J
Trichloroethylene (TCE)		0.4	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	1.0 J	0.15 J	< 1.4	< 0.20	1.3 J	0.19 J	< 1.4	< 0.20	0.81 J	0.12 J

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. NT= Not tested
5. NS= No standard established
6. MassDEP = Massachusetts Department of Environmental Protection
Residential Threshold Values for indoor air taken from the Massachusetts Department of Environmental Protection (MassDEP) Vapor Intrusion Guidance: Site Assessment, Mitigation and Closure dated October 2016.
7. Mitigation and Closure dated October 2016.
8. Values in bold exceed the applicable MassDEP Residential Threshold Values.

Qualifying Note:

- J The reported result is below the laboratory reporting limit and is estimated.

Table 5-10 - Chemical Testing Results - Indoor Air (97 Franklin Street)

Phase V Status Report No. 28 and Remedial Monitoring Report No. 43

50 Tufts Street

Somerville, Massachusetts

Sample Location: Sample Name: Sample Date: Units:			97 Franklin Street (cont.)															
			97FRAN-1 3/8/10		97FRAN-B 3/8/10		97FRAN-1 5/24/24		97FRAN-B 5/24/24		97FRAN-2 5/24/24		97FRAN-1 2/19/25		97FRAN-B 2/19/25		97FRAN-2 2/19/25	
			µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
			µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
Analyte	Method	MassDEP Residential Threshold Values (µg/m ³)																
Volatile Organic Compounds (VOCs)	TO-15																	
1,2-Dichloroethane		0.09	< 0.81	< 0.20	< 0.81	< 0.20	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Carbon Tetrachloride		0.54	< 1.3	< 0.20	< 1.3	< 0.20	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Tetrachloroethylene (PCE)		1.4	1.0 J	0.15 J	1.6	0.23	0.522	0.077	1.72	0.254	<0.136	<0.020	0.190	0.028	0.624	0.092	0.176	0.026
Trichloroethylene (TCE)		0.4	1.0 J	0.15 J	1.6	0.23	0.167	0.031	0.489	0.091	0.150	0.028	0.199	0.037	1.10	0.204	0.220	0.041

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. NT= Not tested
5. NS= No standard established
6. MassDEP = Massachusetts Department of Environmental Protection
Residential Threshold Values for indoor air taken from the Massachusetts Department of Environmental Protection (MassDEP) Vapor Intrusion Guidance: Site Assessment, Mitigation and Closure dated October 2016.
7. Mitigation and Closure dated October 2016.
8. Values in bold exceed the applicable MassDEP Residential Threshold Values.

Qualifying Note:

J The reported result is below the laboratory reporting limit and is estimated.

Table 5-11 - Chemical Testing Results - Indoor Air (156 Glen Street)

Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

			156 Glen Street															
			Location Name:		156GLEN-1		156GLEN-B		156GLEN-1		156GLEN-B		156GLEN-1		156GLEN-B		156GLEN-FF1	
			Sample Name:		5/15/07		5/15/07		9/17/08		9/17/08		1/13/09		1/13/09		2/19/25	
			Sample Date:		5/15/07		5/15/07		9/17/08		9/17/08		1/13/09		1/13/09		2/19/25	
			Units:		µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
Analyte	Method	MassDEP Residential Threshold Values (µg/m ³)																
Volatile Organic Compounds (VOCs)	TO-15																	
1,2-Dichloroethane		0.09	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	0.38 J	0.095 J	< 0.81	< 0.20	NT	NT	NT	NT
Carbon tetrachloride		0.54	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	0.63 J	0.10 J	0.69 J	0.11 J	NT	NT	NT	NT
Tetrachloroethylene (PCE)		1.4	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	0.62 J	0.091 J	<0.136	<0.020	<0.136	<0.020

General Notes

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. NT= Not tested
5. NS= No standard established
6. MassDEP = Massachusetts Department of Environmental Protection
7. Residential Threshold Values for indoor air taken from the Massachusetts Department of Environmental Protection (MassDEP) Vapor Intrusion Guidance: Site Assessment, Mitigation and Closure dated October 2016.
8. Values in bold exceed the applicable MassDEP Residential Threshold Values.

Qualifying Note:

- J The reported result is below the laboratory reporting limit and is estimated.

Table 5-12 - Chemical Testing Results - Pre- and Post-EPMM Indoor Air (166-168 Glen Street)

Phase V Status Report No. 28 and Remedial Monitoring Report No. 43

50 Tufts Street

Somerville, Massachusetts

Sample Location: Sample Name: Sample Date: Units:			Pre-EPMM 166-168 Glen Street				Post-EPMM 166-168 Glen Street															
			166GLEN-1 9/7/07		166GLEN-B 9/7/07		166GLEN-1 11/30/10		166GLEN-B 11/30/10		166-168GLEN-1 2/5/11		166-168GLEN-B 2/5/11		166GLEN-1 12/14/11		166GLEN-B 12/14/11		166GLEN-F1 2/21/25		166GLEN-B1 2/21/25	
			µg/m3	ppbv	µg/m3	ppbv	µg/m3	ppbv	µg/m3	ppbv	µg/m3	ppbv	µg/m3	ppbv	µg/m3	ppbv	µg/m3	ppbv	µg/m3	ppbv	µg/m3	ppbv
Analyte	Method	MassDEP Residential Threshold Values (µg/m ³)																				
Volatile Organic Compounds (VOCs)	TO-15																					
1,1,1-Trichloroethane (TCA)		3	0.47 J	0.087 J	0.65J	0.12 J	< 1.1 J+	< 0.20 J+	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.6	< 0.30	< 1.1	< 0.20	<0.109	<0.020	<0.109	<0.020
Carbon tetrachloride		0.54	0.88 J	0.14 J	0.75 J	0.12 J	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Tetrachloroethylene (PCE)		1.4	5.0	0.74	4.1	0.61	< 1.4 J+	< 0.20 J+	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 2.0	< 0.30	< 1.4	< 0.20	1.12	0.165	0.407	0.060

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. EPMM = Exposure Pathway Mitigation Measure.
5. NT= Not tested
6. NS= No standard established
7. MassDEP = Massachusetts Department of Environmental Protection
8. Residential Threshold Values for indoor air taken from the Massachusetts Department of Environmental Protection (MassDEP) Vapor Intrusion Guidance: Site Assessment, Mitigation and Closure dated October 2016.
9. Values in bold exceed the applicable MassDEP Residential Threshold Values.

Qualifying Note:

- J The reported result is below the laboratory reporting limit and is estimated.

**Table 5-13 - Chemical Testing Results - Pre- and Post-EPMM Installation Indoor Air
(17 Knowlton Street)**

Phase V Status Report No. 28 and Remedial Monitoring Report No. 43

50 Tufts Street

Somerville, Massachusetts

			Sample Location: 17 Knowlton Street pre-EPMM				17 Knowlton Street post-EPMM									
			Sample Name: 17KNOW-1		17KNOW-B		17KNOW-1		17KNOW-B		17KNOW-1		17KNOW-B		17KNOW-B	
			Sample Date: 10/5/07		10/5/07		5/13/09		5/13/09		6/5/09		6/5/09		11/19/10	
			Units:													
Analyte	Method	MassDEP Residential Threshold Values (µg/m ³)	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
Volatile Organic Compounds (VOCs)	TO-15															
1,1,1-Trichloroethane (TCA)		3	0.13 J	0.71 J	<1.1	<0.20	<1.1	< 0.20	<1.1	< 0.20	<1.1	< 0.20	<1.1	< 0.20	<1.1	< 0.20
Carbon tetrachloride		0.54	0.63 J	0.10 J	0.60 J	0.095 J	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	NT	NT
Tetrachloroethylene (PCE)		1.4	1.7	0.25	2.7	0.40	1.6	0.23	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. EPMM = Exposure Pathway Mitigation Measure.
5. NT= Not tested
6. NS= No standard established
7. MassDEP = Massachusetts Department of Environmental Protection
8. Residential Threshold Values for indoor air taken from the Massachusetts Department of Environmental Protection (MassDEP) Vapor Intrusion Guidance: Site Assessment, Mitigation and Closure dated October 2016.
9. Values in bold exceed the applicable MassDEP Residential Threshold Values.

Qualifying Note:

- J The reported result is below the laboratory reporting limit and is estimated.

**Table 5-13 - Chemical Testing Results - Pre- and Post-EPMM Installation Indoor Air
(17 Knowlton Street)**

Phase V Status Report No. 28 and Remedial Monitoring Report No. 43

50 Tufts Street

Somerville, Massachusetts

Sample Location: Sample Name: Sample Date: Units:			17 Knowlton Street post-EPMM (continued)											
			17KNOW-1 2/24/11		17KNOW-B 2/24/11		17KNOW-1 3/8/12		17KNOW-B 3/8/12		17KNOW-1 3/6/25		17KNOW-B 3/6/25	
			µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
			MassDEP Residential Threshold Values (µg/m ³)											
Analyte	Method													
Volatile Organic Compounds (VOCs)	TO-15													
1,1,1-Trichloroethane (TCA)		3	<1.1	< 0.20	<1.1	< 0.20	<1.1	< 0.20	<1.1	< 0.20	<0.109	<0.020	<0.109	<0.020
Carbon tetrachloride		0.54	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Tetrachloroethylene (PCE)		1.4	1.1 J	0.16 J	3.3	0.49	2.6	0.39	< 1.4	< 0.20	0.163	0.024	0.203	0.030

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. EPMM = Exposure Pathway Mitigation Measure.
5. NT= Not tested
6. NS= No standard established
7. MassDEP = Massachusetts Department of Environmental Protection
8. Residential Threshold Values for indoor air taken from the Massachusetts Department of Environmental Protection (MassDEP) Vapor Intrusion Guidance: Site Assessment, Mitigation and Closure dated October 2016.
9. Values in bold exceed the applicable MassDEP Residential Threshold Values.

Qualifying Note:

- J The reported result is below the laboratory reporting limit and is estimated.

**Table 5-14 - Chemical Testing Results - Pre and Post-EPMM Installation Indoor Air
(32 Knowlton Street)**

Phase V Status Report No. 28 and Remedial Monitoring Report No. 43

50 Tufts Street

Somerville, Massachusetts

			Sample Location: Sample Name: Sample Date: Units:		32 Knowlton Street pre-EPMM								32 Knowlton Street Post-EPMM					
					32KNOW-1 10/30/08		32KNOW-B 10/30/08		32KNOW-1 1/16/09		32KNOW-B 1/16/09		32KNOW-1 7/31/09		32KNOW-B 7/31/09		32KNOW-1 1/29/10	
					µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
					MassDEP Residential Threshold Values (µg/m ³)													
Analyte	Method																	
Volatile Organic Compounds (VOCs)	TO-15																	
1,2-Dichloroethane		0.09	0.49 J	0.12 J	<0.81	<0.20	<0.81	<0.20	<0.81	<0.20	<0.81	<0.20	3.0	0.73	<0.81	<0.20	<0.81	<0.20
Carbon tetrachloride		0.54	0.58 J	0.092 J	0.61 J	0.097 J	0.63 J	0.10 J	0.57 J	0.091 J	<1.3	<0.20	<1.3	<0.20	<1.3	<0.20	<1.3	<0.20
cis-1,2-Dichloroethene		0.8	<0.79	<0.20	<0.79	<0.20	<0.79	<0.20	0.59 J	0.15 J	<0.79	<0.20	<0.79	<0.20	<0.79	<0.20	<0.79	<0.20
Tetrachloroethylene (PCE)		1.4	<1.4	<0.20	<1.4	<0.20	5.6	0.82	20	3.0	<1.4	<0.20	<1.4	<0.20	<1.4	<0.20	<1.4	<0.20

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. EPMM = Exposure Pathway Mitigation Measure.
5. NT= Not tested
6. NS= No standard established
7. MassDEP = Massachusetts Department of Environmental Protection
8. Residential Threshold Values for indoor air taken from the Massachusetts Department of Environmental Protection (MassDEP) Vapor Intrusion Guidance: Site Assessment, Mitigation and Closure dated October 2016.
9. Values in bold exceed the applicable MassDEP Residential Threshold Values.

Qualifying Note:

J The reported result is below the laboratory reporting limit and is estimated.

**Table 5-14 - Chemical Testing Results - Pre and Post-EPMM Installation Indoor Air
(32 Knowlton Street)**

Phase V Status Report No. 28 and Remedial Monitoring Report No. 43

50 Tufts Street

Somerville, Massachusetts

Sample Location: Sample Name: Sample Date: Units:			32 Knowlton Street Post-EPMM (cont.)													
			32KNOW-B 1/29/10		32KNOW-1 11/19/10		32KNOW-B 11/19/10		32KNOW-1 3/8/11		32KNOW-B 3/8/11		32KNOW-1 2/28/25		32KNOW-B 2/28/25	
			µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
			µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
Analyte	Method	MassDEP Residential Threshold Values (µg/m ³)														
Volatile Organic Compounds (VOCs)	TO-15															
1,2-Dichloroethane		0.09	< 0.81	< 0.20	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Carbon tetrachloride		0.54	<1.3	< 0.20	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
cis-1,2-Dichloroethene		0.8	<0.79	< 0.20	<0.79	< 0.20	<0.79	< 0.20	<0.79	< 0.20	<0.79	< 0.20	<0.079	<0.020	<0.079	<0.020
Tetrachloroethylene (PCE)		1.4	<1.4	< 0.20	<1.4	< 0.20	<1.4	< 0.20	<1.4	< 0.20	<1.4	< 0.20	0.163	0.024	0.136	0.020

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. EPMM = Exposure Pathway Mitigation Measure.
5. NT= Not tested
6. NS= No standard established
7. MassDEP = Massachusetts Department of Environmental Protection
8. Residential Threshold Values for indoor air taken from the Massachusetts Department of Environmental Protection (MassDEP) Vapor Intrusion Guidance: Site Assessment, Mitigation and Closure dated October 2016.
9. Values in bold exceed the applicable MassDEP Residential Threshold Values.

Qualifying Note:

J The reported result is below the laboratory reporting limit and is estimated.

**Table 5-15 -Chemical Testing Results - Post-EPMM Installation Indoor Air
(34 Knowlton Street)**

Phase V Status Report No. 28 and Remedial Monitoring Report No. 43

50 Tufts Street

Somerville, Massachusetts

Sample Location: Sample Name: Sample Date: Collected By: Units:			34 Knowlton Street											
			34KNOWLTON-BASE		34KNOWLTON-1		34-KNOWLTON-BASE		34-KNOWLTON-1		34-KNOWLTON-BASE		34-KNOWLTON-1	
			6/21/14		6/21/14		4/8/15		4/8/15		4/28/15		4/28/15	
			GEI		GEI		GEI		GEI		GEI		GEI	
Analyte	Method	MassDEP Residential Threshold Values (µg/m ³)	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
Volatile Organic Compounds (VOCs)	TO-15													
1,1,1-Trichloroethane (TCA)		3	<1.1	<0.20	<1.1	<0.20	<1.1	<0.20	1.2	0.22	<1.1	<0.20	<1.1	<0.20
cis-1,2-Dichloroethene		0.8	<0.79	<0.20	<0.79	<0.20	<0.79	<0.20	6.3	1.6	<0.79	<0.20	<0.79	<0.20
Tetrachloroethylene (PCE)		1.4	<1.4	<0.20	<1.4	<0.20	<1.4	<0.20	70.5	10.4	<1.4	<0.20	2.4	0.36
trans-1,2-Dichloroethene		0.8	11	2.8	18	4.6	<0.79	<0.20	<0.79	<0.20	<0.79	<0.20	1.5	0.39
Trichloroethene		0.4	<1.1	<0.20	<1.1	<0.20	<1.1	<0.20	1.2	0.22	<1.1	<0.20	<1.1	<0.20

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. MassDEP = Massachusetts Department of Environmental Protection
5. Residential Threshold Values for indoor air taken from the Massachusetts Department of Environmental Protection (MassDEP) Vapor Intrusion Guidance: Site Assessment, Mitigation and Closure dated October 2016.
6. Highlighted sample indicates most recent sampling round.
7. April 7, 2015 detections of PCE attributed to dry-cleaned clothing present in the residence.
The indoor air samples collected in February 2016 and November 2016 were collected under conditions that simulate the absence of the passive EPMM at the property.
8. Values in bold exceed the applicable MassDEP Residential Threshold Values.
- 9.

**Table 5-15 -Chemical Testing Results - Post-EPMM Installation Indoor Air
(34 Knowlton Street)**

Phase V Status Report No. 28 and Remedial Monitoring Report No. 43

50 Tufts Street

Somerville, Massachusetts

Sample Location: Sample Name: Sample Date: Collected By: Units:			34 Knowlton Street											
			34-KNOWLTON-2 4/28/15 GEI		34-KNOWLTON-3 4/28/15 GEI		34-KNOW-B 2/17/16 GEI		34-KNOW-1 2/17/16 GEI		34-KNOW-B 11/9/16 GEI		34-KNOW-1 11/9/16 GEI	
			µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
			µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
Analyte	Method	MassDEP Residential Threshold Values (µg/m ³)												
Volatile Organic Compounds (VOCs)	TO-15													
1,1,1-Trichloroethane (TCA)		3	<1.1	<0.20	<1.1	<0.20	<1.1	<0.20	<1.1	<0.20	<1.1	<0.20	<1.1	<0.20
cis-1,2-Dichloroethene		0.8	<0.79	<0.20	<0.79	<0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20
Tetrachloroethylene (PCE)		1.4	<1.4	<0.20	<1.4	<0.20	0.54	0.08	2.6	0.38	1.8	0.26	5.5	0.81
trans-1,2-Dichloroethene		0.8	4.8	1.2	16	4.0	< 0.79	< 0.20	< 0.79	< 0.20	1.3	0.32	1.2	0.30
Trichloroethene		0.4	<1.1	<0.20	<1.1	<0.20	<0.21	<0.040	<0.21	<0.040	<0.21	<0.040	0.32	0.06

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. MassDEP = Massachusetts Department of Environmental Protection
5. Residential Threshold Values for indoor air taken from the Massachusetts Department of Environmental Protection (MassDEP) Vapor Intrusion Guidance: Site Assessment, Mitigation and Closure dated October 2016.
6. Highlighted sample indicates most recent sampling round.
7. April 7, 2015 detections of PCE attributed to dry-cleaned clothing present in the residence.
The indoor air samples collected in February 2016 and November 2016 were collected under conditions that simulate the absence of the passive EPMM at the property.
8. Values in bold exceed the applicable MassDEP Residential Threshold Values.

**Table 5-15 -Chemical Testing Results - Post-EPMM Installation Indoor Air
(34 Knowlton Street)**

Phase V Status Report No. 28 and Remedial Monitoring Report No. 43

50 Tufts Street

Somerville, Massachusetts

Sample Location: Sample Name: Sample Date: Collected By: Units:			34 Knowlton Street				34 Knowlton Street			
			34-KNOW-B		34-KNOW-1		34-KNOW-B		34-KNOW-1	
			3/17/17		3/17/17		2/25/25		4/9/25	
			GEI		GEI		GEI		GEI	
Analyte	Method	MassDEP Residential Threshold Values (µg/m ³)	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
Volatile Organic Compounds (VOCs)	TO-15									
1,1,1-Trichloroethane (TCA)		3	<1.1	<0.20	<1.1	<0.20	<0.109	<0.020	<0.109	<0.020
cis-1,2-Dichloroethene		0.8	< 0.79	< 0.20	< 0.79	< 0.20	<0.079	<0.020	<0.079	<0.020
Tetrachloroethylene (PCE)		1.4	1.9	0.28	3.7	0.54	<0.136	<0.020	0.163	0.024
trans-1,2-Dichloroethene		0.8	<0.79	<0.20	<0.79	<0.20	0.135	0.034	0.127	0.032
Trichloroethene		0.4	<0.21	<0.040	<0.21	<0.040	<0.107	<0.020	<0.107	<0.020

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. MassDEP = Massachusetts Department of Environmental Protection
5. Residential Threshold Values for indoor air taken from the Massachusetts Department of Environmental Protection (MassDEP) Vapor Intrusion Guidance: Site Assessment, Mitigation and Closure dated October 2016.
6. Highlighted sample indicates most recent sampling round.
7. April 7, 2015 detections of PCE attributed to dry-cleaned clothing present in the residence.
The indoor air samples collected in February 2016 and November 2016 were collected under conditions that simulate the absence of the passive EPMM at the property.
8. Values in bold exceed the applicable MassDEP Residential Threshold Values.
- 9.

Table 5-16 - Chemical Testing Results - Indoor Air (10 Morton Street)

Phase V Status Report No. 28 and Remedial Monitoring Report No. 43

50 Tufts Street

Somerville, Massachusetts

Sample Name: Sample Date: Units:			Pre-EPMM (original), Pre-Renovation											
			10MORT 1 8/10/07		10MORT B 8/10/07		10MORT-1 11/12/07		10MORT-B 11/12/07		10MORT-1 2/21/08		10MORT-B 2/21/08	
			µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
Analyte	Method	MassDEP Residential Indoor Air Threshold Values (µg/m ³)												
Volatile Organic Compounds (VOCs)	TO-15													
1,1,1-Trichloroethane (TCA)		3	<1.1	<0.20	4.3	0.79	<1.1	<0.20	0.60 J	0.11 J	<1.1	<0.20	0.47 J	0.087 J
1,1,2-Trichloroethane		0.15	<1.1	<0.20	<1.1	<0.20	<1.1	<0.20	<1.1	<0.20	<1.1	<0.20	<1.1	<0.20
Carbon tetrachloride		0.54	0.63 J	0.10 J	<1.3	<0.20	0.69 J	0.11 J	0.62 J	0.099 J	0.63 J	0.10 J	<1.3	<0.20
Tetrachloroethylene (PCE)		1.4	<1.4	<0.20	2.2	0.33	<1.4	<0.20	<1.4	<0.20	2.2	0.32	12	1.8
Trichloroethylene (TCE)		0.4	<1.1	<0.20	<1.1	<0.20	<1.1	<0.20	<1.1	<0.20	<1.1	<0.20	<1.1	<0.20

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. EPMM = Exposure Pathway Mitigation Measure.
5. NT= Not tested
6. NS= No standard established
7. MassDEP = Massachusetts Department of Environmental Protection
Residential Threshold Values for indoor air taken from the Massachusetts Department of Environmental Protection (MassDEP) "Vapor Intrusion Guidance: Site Assessment, Mitigation and Closure" dated October 2016.
8. Site Assessment, Mitigation and Closure" dated October 2016.
9. Values in bold exceed the applicable MassDEP Residential Threshold Values.

Qualifying Note:

- J The reported result is below the laboratory reporting limit and is estimated.

Table 5-16 - Chemical Testing Results - Indoor Air (10 Morton Street)

Phase V Status Report No. 28 and Remedial Monitoring Report No. 43

50 Tufts Street

Somerville, Massachusetts

Sample Name: Sample Date: Units:			Post-EPMM (original), Pre-Renovation											
			10MORT-1 4/3/09		10MORT-B 4/3/09		10MORT-1 2/12/10		10MORT-B 2/12/10		10MORT-1 11/13/10		10MORT-B 11/13/10	
			µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
Analyte	Method	MassDEP Residential Indoor Air Threshold Values (µg/m ³)												
Volatile Organic Compounds (VOCs)	TO-15													
1,1,1-Trichloroethane (TCA)		3	<1.1	<0.20	<1.1	<0.20	<1.1	<0.20	<1.1	<0.20	<1.1	<0.20	<2.7	<0.50
1,1,2-Trichloroethane		0.15	<1.1	<0.20	<1.1	<0.20	<1.1	<0.20	<1.1	<0.20	<1.1	<0.20	<2.7	<0.50
Carbon tetrachloride		0.54	<1.3	<0.20	<1.3	<0.20	<1.3	<0.20	<1.3	<0.20	NT	NT	NT	NT
Tetrachloroethylene (PCE)		1.4	<1.4	<0.20	<1.4	<0.20	<1.4	<0.20	<1.4	<0.20	<1.4	<0.20	<1.4	<0.50
Trichloroethylene (TCE)		0.4	<1.1	<0.20	<1.1	<0.20	<1.1	<0.20	<1.1	<0.20	2.9	0.54	13	2.4

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. EPMM = Exposure Pathway Mitigation Measure.
5. NT= Not tested
6. NS= No standard established
7. MassDEP = Massachusetts Department of Environmental Protection
Residential Threshold Values for indoor air taken from the Massachusetts
Department of Environmental Protection (MassDEP) "Vapor Intrusion Guidance:
Site Assessment, Mitigation and Closure" dated October 2016.
8. Site Assessment, Mitigation and Closure" dated October 2016.
9. Values in bold exceed the applicable MassDEP Residential Threshold Values.

Qualifying Note:

- J The reported result is below the laboratory reporting limit and is estimated.

Table 5-16 - Chemical Testing Results - Indoor Air (10 Morton Street)

Phase V Status Report No. 28 and Remedial Monitoring Report No. 43

50 Tufts Street

Somerville, Massachusetts

			Post-EPMM (original), Pre-Renovation								Post-Renovation			
			10MORT-1 12/18/10		10MORT-B 12/18/10		10MORT-1 3/5/11		10MORT-B 3/5/11		10MORT-1 3/18/25		10MORT-B 3/18/25	
			µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
Analyte	Method	MassDEP Residential Indoor Air Threshold Values (µg/m ³)												
Volatile Organic Compounds (VOCs)	TO-15													
1,1,1-Trichloroethane (TCA)		3	<1.1	<0.20	<1.1	<0.20	<1.1	<0.20	<1.1	<0.20	<0.109	<0.020	<0.109	<0.020
1,1,2-Trichloroethane		0.15	<1.1	<0.20	<1.1	<0.20	<1.1	<0.20	<1.1	<0.20	<0.109	<0.020	<0.109	<0.020
Carbon tetrachloride		0.54	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Tetrachloroethylene (PCE)		1.4	<1.4	<0.20	<1.4	<0.20	<1.4	<0.20	<1.4	<0.20	0.210	0.031	<0.136	<0.020
Trichloroethylene (TCE)		0.4	<1.1	<0.20	1.4	0.26	<1.1	<0.20	2.4	0.45	<0.107	<0.020	<0.107	<0.020

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. EPMM = Exposure Pathway Mitigation Measure.
5. NT= Not tested
6. NS= No standard established
7. MassDEP = Massachusetts Department of Environmental Protection
Residential Threshold Values for indoor air taken from the Massachusetts
Department of Environmental Protection (MassDEP) "Vapor Intrusion Guidance:
Site Assessment, Mitigation and Closure" dated October 2016.
8. Site Assessment, Mitigation and Closure" dated October 2016.
9. Values in bold exceed the applicable MassDEP Residential Threshold Values.

Qualifying Note:

- J The reported result is below the laboratory reporting limit and is estimated.

**Table 5-17 - Chemical Testing Results - Post-EPMM Installation Indoor Air
(11 Morton Street)**

Phase V Status Report No. 28 and Remedial Monitoring Report No. 43

50 Tufts Street

Somerville, Massachusetts

		Sample Location: Sample Name: Sample Date: Units:	11 Morton Street													
			11 MORT-1 10/23/08		11 MORT-B 10/23/08		11MORT-1A 1/21/09		11MORT-1B 1/21/09		11MORT-B1 1/21/09		11MORT-B2 1/21/09		11MORT-1 8/11/09	
			µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
Analyte	Method	MassDEP Residential Threshold Values (µg/m ³)														
Volatile Organic Compounds (VOCs)	TO-15															
1,2-Dichloroethane		0.09	0.45 J	0.11 J	0.49 J	0.12 J	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	11	2.8
Carbon tetrachloride		0.54	0.63 J	0.10 J	0.69 J	0.11 J	0.88 J	0.14 J	0.82 J	0.13 J	1.6	0.25	1.5	0.24	< 1.3	< 0.20
Tetrachloroethylene (PCE)		1.4	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20
Trichloroethylene (TCE)		0.4	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. EPMM = Exposure Pathway Mitigation Measure.
5. NT= Not tested
6. NS= No standard established
7. MassDEP = Massachusetts Department of Environmental Protection
8. Residential Threshold Values for indoor air taken from the Massachusetts Department of Environmental Protection (MassDEP) "Vapor Intrusion Guidance: Site Assessment, Mitigation and Closure" dated October 2016.
9. The samples from January 21, 2009 (11MORT-B1 and B2, and 11MORT-1A and 1B) were field duplicates of each other.
10. The laboratory notes for 11MORT-B from April 2025 indicate that the cansiter ran ambient.
11. Values in bold exceed the applicable MassDEP Residential Threshold Values.

Qualifying Note:

- J The reported result is below the laboratory reporting limit and is estimated.

**Table 5-17 - Chemical Testing Results - Post-EPMM Installation Indoor Air
(11 Morton Street)**

Phase V Status Report No. 28 and Remedial Monitoring Report No. 43

50 Tufts Street

Somerville, Massachusetts

		Sample Location: Sample Name: Sample Date: Units:	11 Morton Street (continued)											
			11MORT-B 8/11/09		11MORT-1 2/23/10		11MORT-B 2/23/10		11MORT-1 2/17/16		11MORT-B 2/17/16		11MORT-1 5/26/21	
			µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
Analyte	Method	MassDEP Residential Threshold Values (µg/m ³)												
Volatile Organic Compounds (VOCs)	TO-15													
1,2-Dichloroethane		0.09	2.0	0.49	< 0.81	< 0.20	< 0.81	< 0.20	NT	NT	NT	NT	NT	NT
Carbon tetrachloride		0.54	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	NT	NT	NT	NT	NT	NT
Tetrachloroethylene (PCE)		1.4	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	1.7	0.25	2.2	0.33	0.190	0.028
Trichloroethylene (TCE)		0.4	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 0.21	< 0.040	< 0.21	< 0.040	0.279	0.052

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. EPMM = Exposure Pathway Mitigation Measure.
5. NT= Not tested
6. NS= No standard established
7. MassDEP = Massachusetts Department of Environmental Protection
8. Residential Threshold Values for indoor air taken from the Massachusetts Department of Environmental Protection (MassDEP) "Vapor Intrusion Guidance: Site Assessment, Mitigation and Closure" dated October 2016.
9. The samples from January 21, 2009 (11MORT-B1 and B2, and 11MORT-1A and 1B) were field duplicates of each other.
10. The laboratory notes for 11MORT-B from April 2025 indicate that the cansister ran ambient.
11. Values in bold exceed the applicable MassDEP Residential Threshold Values.

Qualifying Note:

- J The reported result is below the laboratory reporting limit and is estimated.

**Table 5-17 - Chemical Testing Results - Post-EPMM Installation Indoor Air
(11 Morton Street)**

Phase V Status Report No. 28 and Remedial Monitoring Report No. 43

50 Tufts Street

Somerville, Massachusetts

		Sample Location: Sample Name: Sample Date: Units:	11 Morton Street (continued)							
			11MORT-B 5/26/21		11MORT-1 4/8/25		11MORT-1 5/7/25		11MORT-B 5/7/25	
			µg/m3	ppbv	µg/m3	ppbv	µg/m3	ppbv	µg/m3	ppbv
Analyte	Method	MassDEP Residential Threshold Values (µg/m ³)								
Volatile Organic Compounds (VOCs)	TO-15									
1,2-Dichloroethane		0.09	NT	NT	NT	NT	NT	NT	NT	NT
Carbon tetrachloride		0.54	NT	NT	NT	NT	NT	NT	NT	NT
Tetrachloroethylene (PCE)		1.4	<0.136	<0.020	<0.136	<0.020	0.203	0.030	0.217	0.032
Trichloroethylene (TCE)		0.4	0.301	0.056	1.05	0.196	2.77	0.516	0.269	0.05

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. EPMM = Exposure Pathway Mitigation Measure.
5. NT= Not tested
6. NS= No standard established
7. MassDEP = Massachusetts Department of Environmental Protection
8. Residential Threshold Values for indoor air taken from the Massachusetts Department of Environmental Protection (MassDEP) "Vapor Intrusion Guidance: Site Assessment, Mitigation and Closure" dated October 2016.
9. The samples from January 21, 2009 (11MORT-B1 and B2, and 11MORT-1A and 1B) were field duplicates of each other.
10. The laboratory notes for 11MORT-B from April 2025 indicate that the cansiter ran ambient.
11. Values in bold exceed the applicable MassDEP Residential Threshold Values.

Qualifying Note:

- J The reported result is below the laboratory reporting limit and is estimated.

**Table 5-18 - Chemical Testing Results - Pre- and Post-EPMM Indoor Air
(19-19A Morton Street)**

Phase V Status Report No. 28 and Remedial Monitoring Report No. 43

50 Tufts Street

Somerville, Massachusetts

			Pre-EPEM 19-19A Morton Street															
			Location Name:		19MORT-1		19MORT-B		19MORT-1		19MORT-B		19MORT-1		19MORT-B		19MORT-1	
			Sample Name:		7/2/07		7/2/07		4/4/08		4/4/08		8/18/08		8/18/08		1/13/09	
			Sample Date:		Units:													
					µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
Analyte	Method	MassDEP Residential Threshold Values (µg/m ³)																
Volatile Organic Compounds (VOCs)	TO-15																	
1,2-Dichloroethane		0.09			< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	4.9	1.2	0.73 J	0.18 J	< 0.81	< 0.20
Carbon tetrachloride		0.54			< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	0.69 J	0.11 J	0.88 J	0.14 J	0.69 J	0.11 J	0.63 J	0.10 J
Tetrachloroethylene (PCE)		1.4			< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	0.68 J	0.10 J	< 1.4	< 0.20	< 1.4	< 0.20	6.0	0.89
																	8.8	1.3

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. EPMM = Exposure Pathway Mitigation Measure.
5. NT= Not tested
6. NS= No standard established
7. MassDEP = Massachusetts Department of Environmental Protection
8. Residential Threshold Values for indoor air taken from the Massachusetts Department of Environmental Protection (MassDEP) "Vapor Intrusion Guidance: Site Assessment, Mitigation and Closure" dated October 2016.
9. Values in bold exceed the applicable MassDEP Residential Threshold Values.

Qualifying Note:

- J The reported result is below the laboratory reporting limit and is estimated.

**Table 5-18 - Chemical Testing Results - Pre- and Post-EPMM Indoor Air
(19-19A Morton Street)**

Phase V Status Report No. 28 and Remedial Monitoring Report No. 43

50 Tufts Street

Somerville, Massachusetts

			Location Name: Post-EPEM 19-19A Morton Street															
			Sample Name:		19MORT-1		19MORT-B		19MORT-1		19MORT-B		19MORT-1		19MORT-B		19MORT-1	
			Sample Date:		9/3/09		9/3/09		1/29/10		1/29/10		12/7/10		12/7/10		4/10/11	
			Units:		µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
Analyte	Method	MassDEP Residential Threshold Values (µg/m ³)																
Volatile Organic Compounds (VOCs)	TO-15																	
1,2-Dichloroethane		0.09	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	NT	NT	NT	NT	NT	NT	NT	NT
Carbon tetrachloride		0.54	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	NT	NT	NT	NT	NT	NT	NT	NT
Tetrachloroethylene (PCE)		1.4	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	3.1	0.45	4.8	0.71	< 1.4	< 0.20	2.2	0.33

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. EPMM = Exposure Pathway Mitigation Measure.
5. NT= Not tested
6. NS= No standard established
7. MassDEP = Massachusetts Department of Environmental Protection
8. Residential Threshold Values for indoor air taken from the Massachusetts Department of Environmental Protection (MassDEP) "Vapor Intrusion Guidance: Site Assessment, Mitigation and Closure" dated October 2016.
9. Values in bold exceed the applicable MassDEP Residential Threshold Values.

Qualifying Note:

- J The reported result is below the laboratory reporting limit and is estimated.

**Table 5-18 - Chemical Testing Results - Pre- and Post-EPMM Indoor Air
(19-19A Morton Street)**

Phase V Status Report No. 28 and Remedial Monitoring Report No. 43

50 Tufts Street

Somerville, Massachusetts

		Location Name:		Post-EPEM 19-19A Morton Street							
		Sample Name:		19MORT-1		19MORT-B		19MORT-1		19MORT-B	
		Sample Date:		3/2/12		3/2/12		2/27/25		2/27/25	
		Units:		µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
Analyte	Method	MassDEP Residential Threshold Values (µg/m ³)									
Volatile Organic Compounds (VOCs)	TO-15										
1,2-Dichloroethane		0.09		NT	NT	NT	NT	NT	NT	NT	NT
Carbon tetrachloride		0.54		NT	NT	NT	NT	NT	NT	NT	NT
Tetrachloroethylene (PCE)		1.4		< 1.4	< 0.20	1.0 J	0.15 J	0.136	0.02	0.142	0.021

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. EPMM = Exposure Pathway Mitigation Measure.
5. NT= Not tested
6. NS= No standard established
7. MassDEP = Massachusetts Department of Environmental Protection
8. Residential Threshold Values for indoor air taken from the Massachusetts Department of Environmental Protection (MassDEP) "Vapor Intrusion Guidance: Site Assessment, Mitigation and Closure" dated October 2016.
9. Values in bold exceed the applicable MassDEP Residential Threshold Values.

Qualifying Note:

- J The reported result is below the laboratory reporting limit and is estimated.

Table 5-19 - Chemical Testing Results - Indoor Air (21 Morton Street)
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

			21 Morton Street													
			Location Name:		Sample Name:		Sample Date:		Units:							
			21MORT-1		21MORT-B		21MORT-B		21MORT-1		21MORT-B		21MORT-FF1		21MORT-B1	
			5/15/07		5/15/07		9/17/08		1/13/09		1/13/09		2/19/25		2/19/25	
Analyte	Method	MassDEP Residential Threshold Values (µg/m³)	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv
Volatile Organic Compounds (VOCs)																
Carbon tetrachloride	TO-15	0.54	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	0.63 J	0.10 J	NT	NT	NT	NT

General Notes

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. NT= Not tested
5. NS= No standard established
6. MassDEP = Massachusetts Department of Environmental Protection
7. Residential Threshold Values for indoor air taken from the Massachusetts Department of Environmental Protection (MassDEP) Vapor Intrusion Guidance: Site Assessment, Mitigation and Closure dated October 2016.
8. Values in bold exceed the applicable MassDEP Residential Threshold Values.

Qualifying Note:

- J The reported result is below the laboratory reporting limit and is estimated.

Table 5-20. Chemical Testing Results - Indoor Air (31 Tufts Street)
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

Sample Property: Sample Name: Sample Location: Sample Date: Collected By: Vent Status:				31 Tufts Street															
				31TUFT-IA1				31TUFT-IA2				31TUFT-IA3				31TUFT-IA4		31TUFT-IA5	
				Unit 104				Unit 101				Utility				Unit 103		Unit 102	
				10/17/2023	1/31/2024	9/6/2024	2/19/2025	10/17/2023	1/31/2024	9/6/2024	2/19/2025	10/17/2023	1/31/2024	9/6/2024	2/19/2025	9/6/2024	2/19/2025	9/6/2024	2/19/2025
				GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI
				Open	Open	Open	Closed	Open	Open	Open	Closed	Open	Open	Open	Closed	Open	Closed	Open	Closed
Analyte	Method	Units	MassDEP Residential Threshold Values (µg/m ³)																
Volatile Organic Compounds (VOCs)	TO-15	µg/m ³																	
Tetrachloroethene			1.4	<0.136	<0.136	0.604	<0.136	0.203	<0.136	<0.136	0.359	0.176	<0.136	0.210	0.231	<0.136	<0.136	0.142	<0.136
trans-1,2-Dichloroethene			0.8	<0.079	0.103	0.139	0.341	<0.079	<0.079	0.139	<0.079	<0.079	<0.079	0.147	<0.079	0.119	<0.079	0.167	<0.079

- General Notes**
- 1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
 - 2. µg/m³ = micrograms per cubic meter.
 - 3. ppbv = parts per billion by volume.
 - 4. EPMM = Exposure Pathway Mitigation Measure.
 - 5. NT= Not tested
 - 6. NS= No standard established
 - 7. MassDEP = Massachusetts Department of Environmental Protection
 - 8. Residential Threshold Values for indoor air taken from the Massachusetts Department of Environmental Protection (MassDEP) Vapor Intrusion Guidance: Site Assessment, Mitigation and Closure dated October 2016.
 - 9. During the February 2025 sampling the vent pipe was closed for one week prior to sampling.
 - 10. Values in bold exceed the applicable MassDEP Residential Threshold Values.

Table 5-21 - Chemical Testing Results - Indoor Air (103 Washington Street)

Phase V Status Report No. 28 and Remedial Monitoring Report No. 43

50 Tufts Street

Somerville, Massachusetts

Sample Location: Sample Name: Sample Date: Units:				First Floor									
				103Wash-F1 5/10/23		103Wash-F1 7/6/23		103Wash-F1 3/5/24		103Wash-F1 12/4/24		103Wash-F1 2/21/25	
				µg/m3	ppbv	µg/m3	ppbv	µg/m3	ppbv	µg/m3	ppbv	µg/m3	ppbv
Analyte	Method	MassDEP Residential Indoor Air Threshold Values (µg/m³)	MassDEP Commerical Indoor Air Threshold Values (µg/m³)										
Volatile Organic Compounds (VOCs)	TO-15												
cis-1,2,-Dichloroethylene		0.8	5.3	<0.079	<0.020	0.107	0.027	<0.079	<0.020	<0.079	<0.020	<0.079	<0.020
Tetrachloroethylene (PCE)		1.4	4.1	0.278	0.041	0.692	0.102	<0.136	<0.020	0.251	0.037	<0.136	<0.020
trans-1,2-Dichloroethylene		0.8	53	0.194	0.049	0.852	0.215	<0.079	<0.020	<0.079	<0.020	<0.079	<0.020
Trichloroethylene (TCE)		0.4	1.8	<0.107	<0.020	0.204	0.038	<0.107	<0.020	<0.107	<0.020	<0.107	<0.020

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m3 = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. "<" = The analyte was not detected at a concentration above the specified laboratory reporting limit.
5. MassDEP = Massachusetts Department of Environmental Protection
6. Residential Threshold Values for indoor air taken from the Massachusetts Department of Environmental Protection (MassDEP) Vapor Intrusion Guidance: Site Assessment, Mitigation and Closure dated October 2016.
7. Commercial Threshold Values taken from the Massachusetts Department of Environmental Protection (MassDEP) "Vapor Intrusion Guidance: Site Assessment, Mitigation and Closure" dated October 2016.
8. Values in bold exceed the applicable MassDEP Residential Threshold Values.

Table 5-21 - Chemical Testing Results - Indoor Air (103 Washington Street)

Phase V Status Report No. 28 and Remedial Monitoring Report No. 43

50 Tufts Street

Somerville, Massachusetts

				Sample Location: Basement							
				Sample Name: 103Wash-B1		103Wash-B1		103Wash-B1		103Wash-B1	
				Sample Date: 7/6/23		3/5/24		12/4/24		2/11/25	
				Units:							
				µg/m3	ppbv	µg/m3	ppbv	µg/m3	ppbv	µg/m3	ppbv
Analyte	Method	MassDEP Residential Indoor Air Threshold Values (µg/m ³)	MassDEP Commercial Indoor Air Threshold Values (µg/m ³)								
Volatile Organic Compounds (VOCs)	TO-15										
cis-1,2,-Dichloroethylene		0.8	5.3	0.599	0.151	<0.079	<0.020	<0.079	<0.020	<0.079	<0.020
Tetrachloroethylene (PCE)		1.4	4.1	2.28	0.336	0.325	0.048	0.888	0.131	0.542	0.080
trans-1,2-Dichloroethylene		0.8	53	6.50	1.64	<0.079	<0.020	<0.079	<0.020	<0.079	<0.020
Trichloroethylene (TCE)		0.4	1.8	0.919	0.171	<0.107	<0.020	<0.107	<0.020	<0.107	<0.020

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m3 = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. "<" = The analyte was not detected at a concentration above the specified laboratory reporting limit.
5. MassDEP = Massachusetts Department of Environmental Protection
6. Residential Threshold Values for indoor air taken from the Massachusetts Department of Environmental Protection (MassDEP) Vapor Intrusion Guidance: Site Assessment, Mitigation and Closure dated October 2016.
7. Commercial Threshold Values taken from the Massachusetts Department of Environmental Protection (MassDEP) "Vapor Intrusion Guidance: Site Assessment, Mitigation and Closure" dated October 2016.
8. Values in bold exceed the applicable MassDEP Residential Threshold Values.

Table 5-21 - Chemical Testing Results - Indoor Air (103 Washington Street)

Phase V Status Report No. 28 and Remedial Monitoring Report No. 43

50 Tufts Street

Somerville, Massachusetts

				Sample Location: Second Floor							
				Sample Name: 103Wash-UNIT1		103Wash-UNIT1		103Wash-UNIT3		103Wash-F2	
				Sample Date: 12/4/24		2/11/25		12/4/24		2/11/25	
				Units: µg/m3 ppbv		µg/m3 ppbv		µg/m3 ppbv		µg/m3 ppbv	
Analyte	Method	MassDEP Residential Indoor Air Threshold Values (µg/m ³)	MassDEP Commerical Indoor Air Threshold Values (µg/m ³)								
Volatile Organic Compounds (VOCs)	TO-15										
cis-1,2,-Dichloroethylene		0.8	5.3	<0.079	<0.020	<0.079	<0.020	<0.079	<0.020	<0.079	<0.020
Tetrachloroethylene (PCE)		1.4	4.1	0.176	0.026	0.170	0.025	0.264	0.039	0.312	0.046
trans-1,2-Dichloroethylene		0.8	53	<0.079	<0.020	<0.079	<0.020	<0.079	<0.020	<0.079	<0.020
Trichloroethylene (TCE)		0.4	1.8	<0.107	<0.020	<0.107	<0.020	<0.107	<0.020	<0.107	<0.020

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m3 = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. "<" = The analyte was not detected at a concentration above the specified laboratory reporting limit.
5. MassDEP = Massachusetts Department of Environmental Protection
6. Residential Threshold Values for indoor air taken from the Massachusetts Department of Environmental Protection (MassDEP) Vapor Intrusion Guidance: Site Assessment, Mitigation and Closure dated October 2016.
7. Commerical Threshold Values taken from the Massachusetts Department of Environmental Protection (MassDEP) "Vapor Intrusion Guidance: Site Assessment, Mitigation and Closure" dated October 2016.
8. Values in bold exceed the applicable MassDEP Residential Threshold Values.

Table 5-22 - Chemical Testing Results - Indoor Air (105 Washington Street)

Phase V Status Report No. 28 and Remedial Monitoring Report No. 43

50 Tufts Street

Somerville, Massachusetts

Sample Location: Sample Name: Sample Date: Units:				Basement																	
				105WASH-B1 3/15/22		105WASH-B2 3/15/22		105WASH-B1 2/15/23		105WASH-B1 5/10/23		105WASH-B2 5/10/23		105WASH-B1 12/4/24		105WASH-B2 12/4/24		105WASH-B1 2/11/25		105WASH-B2 2/11/25	
				µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv
Analyte	Method	MassDEP Residential Indoor Air Threshold Values (µg/m³)	Commerical Indoor Air Threshold Values (µg/m³)																		
Volatile Organic Compounds (VOCs)				TO-15																	
1,1-Dichloroethane		0.8	710	0.247	0.061	0.113	0.028	<0.081	<0.020	0.174	0.043	0.101	0.025	<0.081	<0.020	<0.081	<0.020	<0.081	<0.020		
Tetrachloroethylene (PCE)		1.4	4.1	1.15	0.169	0.57	0.084	0.549	0.081	0.841	0.124	0.536	0.079	1.37	0.202	0.312	0.046	0.780	0.115		
Trichloroethylene (TCE)		0.4	1.8	0.247	0.027	<0.107	<0.020	<0.107	<0.020	0.129	0.024	<0.107	<0.020	<0.107	<0.020	<0.107	<0.020	<0.107	<0.020		

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. "<" = The analyte was not detected at a concentration above the specified laboratory reporting limit.
5. MassDEP = Massachusetts Department of Environmental Protection
6. Residential Threshold Values for indoor air taken from the Massachusetts Department of Environmental Protection (MassDEP) Vapor Intrusion Guidance: Site Assessment, Mitigation and
7. Commercial Threshold Values taken from the Massachusetts Department of Environmental Protection (MassDEP) "Vapor Intrusion Guidance: Site Assessment, Mitigation and Closure" dated October 2016.
8. Values in bold exceed the applicable MassDEP Residential Threshold Values.

Table 5-22 - Chemical Testing Results - Indoor Air (105 Washington Street)

Phase V Status Report No. 28 and Remedial Monitoring Report No. 43

50 Tufts Street

Somerville, Massachusetts

Sample Location: Sample Name: Sample Date: Units:				First Floor										Second Floor			
				105WASH-FF1 3/15/22		105WASH-FF1 2/15/23		105WASH-FF1 5/10/23		105WASH-F1 12/4/24		105WASH-F1 2/11/25		105WASH-F2 12/4/24		105WASH-F2 2/11/25	
				µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
Analyte	Method	MassDEP Residential Indoor Air Threshold Values (µg/m ³)	MassDEP Commercial Indoor Air Threshold Values (µg/m ³)														
Volatile Organic Compounds (VOCs)	TO-15																
1,1-Dichloroethane		0.8	710	0.267	0.066	0.138	0.034	0.121	0.03	<0.081	<0.020	<0.081	<0.020	<0.081	<0.020	<0.081	<0.020
Tetrachloroethylene (PCE)		1.4	4.1	1.05	0.155	1.38	0.203	0.373	0.055	1.40	0.206	0.705	0.104	0.400	0.059	0.271	0.040
Trichloroethylene (TCE)		0.4	1.8	0.14	0.026	<0.107	<0.020	<0.107	<0.020	0.107	0.020	<0.107	<0.020	<0.107	<0.020	<0.107	<0.020

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. "<" = The analyte was not detected at a concentration above the specified laboratory reporting limit.
5. MassDEP = Massachusetts Department of Environmental Protection
6. Residential Threshold Values for indoor air taken from the Massachusetts Department of Environmental Protection (MassDEP) Vapor Intrusion Guidance: Site Assessment, Mitigation and
7. Commercial Threshold Values taken from the Massachusetts Department of Environmental Protection (MassDEP) "Vapor Intrusion Guidance: Site Assessment, Mitigation and Closure" dated October 2016.
8. Values in bold exceed the applicable MassDEP Residential Threshold Values.

Table 5-23. Summary of Meteorological Data During Air Sampling Events
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

Sample Location	Sample Date	Sample Location	Outside Temperature (°F) ^{1,3}		Outside Barometric Pressure (in. Hg) ^{2,4}		Prevailing Wind Direction		General Weather Conditions		Significant precipitation within 12 hours prior to Sampling?
			Start	End	Start	End	Start	End	Start	End	
Residences											
84 Franklin Street	5/6/2025 - 5/7/2025	F1	57	61	30.22	29.98	E	S	Cloudy	Mostly Cloudy	Yes
		F2									
		B									
91-93 Franklin Street	2/27/2025 - 2/28/2025	F1 (91 Frank)	39	42	29.84	29.6	ESE	W	Rain	Sunny	Yes
		F1 (93 Frank)									
		B									
97 Franklin Street	2/18/2025 - 2/19/2025	F1	16	15	29.95	30.18	W	WNW	Sunny		No
		F2									
		B									
	2/19/2025	SS1	15		30.17	30.21	WNW				
	SS2										
166-168 Glen Street	2/20/2025 - 2/21/2025	F1	18	24	29.97	29.98	NNW	NW	Mostly Cloudy		No
	B										
17 Knowlton Street	3/5/2025 - 3/6/2025	F1	51	53	29.94	29.25	SSW		Drizzle	Cloudy	Yes
	B										
32 Knowlton Street	2/27/2025 - 2/28/2025	F1	41	43	29.78	29.6	SE	WNW	Drizzle	Cloudy	Yes
	B										
34 Knowlton Street	2/24/2025 - 2/25/2025	B	42	52	29.99	29.7	S		Sunny	Partly Cloudy	No
	3/26/2025 - 3/27/2025	F1	50	47	29.94	30.04	W	NW			
10 Morton Street	3/17/2025 - 3/18/2025	F1	55	41	29.8	30.03	SSW	N	Rain	Sunny	Yes
		B									
	3/19/2025	SV5	41	44	30.06	30.04	N		Sunny		
		SV6									
11 Morton Street	4/7/2025 - 4/8/2025	F1	38	39	29.9	29.58	NE	SW	Rain	Drizzle	Yes
		B									
	5/6/2025 - 5/7/2025	F1	57	61	30.22	29.98	E	S	Cloudy	Mostly Cloudy	
									B		
19-19A Morton Street	2/26/2025 - 2/27/2025	F1	47	41	29.77	29.78	WNW	SE	Sunny	Drizzle	No
	B										
21 Morton Street (and 156 Glen Street)	2/18/2025 - 2/19/2025	F1 (156 Glen)	21		29.94	30.18	W		Sunny		No
		B1 (156 Glen)									
		F1 (21 Mort)									
		B1 (21 Mort)									
	2/19/2025	SV1 (156 Glen)	24	28	30.16	30.15	WNW		Sunny		
		SV1 (21 Mort)									
SV2 (21 Mort)											
31 Tufts Street	2/18/2025 - 2/19/2025	IA1	20	18	29.94	30.19	W	WNW	Sunny		No
		IA2									
		IA3									
		IA4									
		IA5									
	2/19/2025	SV1	19	22	30.19	30.17	WNW				No
	SV2										
103 Washington Street	2/10/2025 - 2/11/2025	F1	32	29	30.27	30.32	W		Cloudy		No
		B1									
		Unit 1									
		Unit 2									
	2/20/2025 - 2/21/2025	F1	22	28	29.95	29.99	NNW	NW	Cloudy	Mostly Cloudy	
2/11/2025	SV1	29	30	30.32	30.31	W		Cloudy			
	SV2										
105 Washington Street	2/10/2025 - 2/11/2025	F1	32	29	30.27	30.32	W		Cloudy		No
		F2									
		B1									
		B2									
	2/11/2025	SV1	29	30	30.32	30.31	W				

General Notes:

1. °F = degrees Fahrenheit.
2. in. Hg = inches of mercury.
3. Temperatures were measured in the field using a hand-held thermometer.
4. Barometric pressures were measured in the field with a digital barometer.

Table 6-1. Summary of SSDS Monitoring Events - Capuano Center
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
 50 Tufts Street
 Somerville, Massachusetts

Monitoring Date	Monitoring Event per RMR Report Period	Type of Monitoring Event	SSDS Field Parameters Measured	Analytical Samples Collected (Yes/No)?
1/8/2025	1	SSDS Quarterly Monitoring	-Pressure readings, VOC concentrations, and flow rate at each manifold pipe. -Pressure readings, VOC concentrations, and flow rate at all the exterior extraction pipes.	No
4/24/2025	2	SSDS Quarterly Monitoring	-Pressure readings, VOC concentrations, and flow rate at each manifold pipe. -Pressure readings, VOC concentrations, and flow rate at all the exterior extraction pipes.	No

General Notes:

1. SSDS = Sub-Slab Depressurization System.
2. RMR = Remedial Monitoring Report.
3. VOC = Volatile Organic Compound.
4. VOC measurements collected with a ppm-RAE calibrated to 100 parts per million (ppm) isobutylene.
5. Pressure readings collected using a Dwyer 475-000-FM manometer.

Table 6-2. Chemical Testing Results - Capuano Center Indoor and Outdoor Air
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

Sample Location: Sample ID:		Cafetorium		Room 101				Room 108				Room 121		Room 122						Room 125				Room 126					
		150 GLEN-CAF		150 GLEN-ROOM 101A		150 GLEN-ROOM 101B		150 GLEN-ROOM 108A		150 GLEN-ROOM 108B		150 GLEN-ROOM 121		150 GLEN-ROOM 122		150 GLEN-RM 122		150 GLEN-RM 122		150 GLEN-ROOM 125A		150 GLEN-ROOM 125B		150 GLEN-ROOM 126		150 GLEN-ROOM 100 (FD-Room 126)		150 GLEN-RM 126	
		1/6/07		12/27/06		12/28/06		12/27/06		12/28/06		1/6/07		1/6/07		2/7/07		5/23/15		12/27/06		12/28/06		1/13/07		1/13/07		2/7/07	
Sample Date:		Units:		µg/m ³		ppbv		µg/m ³		ppbv		µg/m ³		ppbv		µg/m ³		ppbv		µg/m ³		ppbv		µg/m ³		ppbv		µg/m ³	
Analyte	Method	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
Volatile Organic Compounds (VOCs)		TO-15																											
Carbon tetrachloride		0.49 J J+	0.078 J J+	< 1.3	< 0.20	< 1.3	< 0.20	0.94 J	0.15 J	< 1.3	< 0.20	0.52 J J+	0.082 J J+	0.51 J	0.081 J J+	0.69 J	0.11 J	NT	NT	1.0 J	0.16 J	< 1.3	< 0.20	0.69 J	0.11 J	0.63 J	0.10 J	0.94 J	0.15 J
Dichloroethane, 1,1,-		< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20
Dichloroethane, 1,2,-		< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20
Dichloroethene, 1,1,-		< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20
Dichloroethylene, cis-1,2,-		< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20
Tetrachloroethane, 1,1,2,2,-		< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20
Tetrachloroethylene (PCE)		0.88 J J+	0.13 J J+	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	0.88 J	0.13 J	0.75 J	0.11 J	< 1.4	< 0.20
Trichloroethane, 1,1,1,- (TCA)		< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20
Trichloroethylene (TCE)		< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20

- General Notes:**
1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
 2. µg/m³ = micrograms per cubic meter.
 3. ppbv = parts per billion by volume.
 4. "<" = The analyte was not detected at a concentration above the specified laboratory reporting limit.
 5. FD = Field Duplicate.
 6. The samples collected in August 2009, November 2009, February 2010, November 2010, March 2011, and May 2015 were collected over a 24 hour period.
 7. NT = Not Tested.

- Qualifying Notes:**
- J The reported result is below the laboratory reporting limit and is estimated.
- J+ The reported result is estimated.

Table 6-2. Chemical Testing Results - Capuano Center Indoor and Outdoor Air
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

Sample Location: Sample ID:		Room 126 (continued)																											
		150GLEN-ROOM 126		150 GLEN-ROOM 126		150 GLEN-RM 126		150GLEN-RM126		150GLEN-RM126		150GLEN-RM126		150GLEN-RM126		150GLEN-RM126		150GLEN-RM126		150GLEN-RM126		150GLEN-RM126		150GLEN-RM126		150GLEN-RM126		150GLEN-RM126	
		3/8/07		4/20/07		5/17/07		7/30/07		9/10/07		10/8/07		10/14/07		11/15/07		12/13/07		1/21/08		2/19/08		2/22/08		3/172008		4/21/08	
Sample Date:		Units:																											
Analyte	Method	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv
Volatile Organic Compounds (VOCs)		TO-15																											
Carbon tetrachloride		< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	0.60 J	0.095 J	0.69 J	0.11 J	0.82 J	0.13 J	< 1.3	< 0.20	0.69 J	0.11 J	0.59 J	0.093 J	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20
Dichloroethane,1,1,-		< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20
Dichloroethane,1,2,-		< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20
Dichloroethene,1,1,-		< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20
Dichloroethylene, cis-1,2,-		< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20
Tetrachloroethane,1,1,2,2,-		< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20
Tetrachloroethylene (PCE)		< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20
Trichloroethane,1,1,1,- (TCA)		< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20
Trichloroethylene (TCE)		< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20

- General Notes:**
1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
 2. µg/m³ = micrograms per cubic meter.
 3. ppbv = parts per billion by volume.
 4. "<" = The analyte was not detected at a concentration above the specified laboratory reporting limit.
 5. FD = Field Duplicate.
 6. The samples collected in August 2009, November 2009, February 2010, November 2010, March 2011, and May 2015 were collected over a 24 hour period.
 - 7 NT = Not Tested.

- Qualifying Notes:**
- J The reported result is below the laboratory reporting limit and is estimated.
- J+ The reported result is estimated.

Table 6-2. Chemical Testing Results - Capuano Center Indoor and Outdoor Air
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

Sample Location: Sample ID:		Room 126 (continued)																		Room 134						Room 136		Room 137			
		150GLEN-RM126		150GLEN-RM126		150GLEN-RM126		150GLEN-RM126		150GLEN-RM126		150GLEN-RM126		150GLEN-RM126		150GLEN-RM126		150GLEN-RM126		150 GLEN-ROOM 134		150 GLEN-RM 134		150 GLEN-RM 134		150 GLEN-ROOM 136		150 GLEN-ROOM 137A		150 GLEN-ROOM 137B	
		8/18/08		11/24/08		3/2/09		8/27/09		11/11/09		2/19/10		11/11/10		3/17/11		5/23/15		1/13/07		2/7/07		5/23/15		1/13/07		1/6/07		1/6/07	
Analyte	Method	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv
Volatile Organic Compounds (VOCs)		TO-15																													
Carbon tetrachloride		0.60 J	0.096 J	0.60 J	0.096 J	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	NT	NT	NT	NT	NT	NT	0.75 J	0.12 J	0.94 J	0.15 J	NT	NT	0.69 J	0.11 J	0.52 J J+	0.082 J J+	< 1.3	< 0.20
Dichloroethane,1,1,-		< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.53	< 0.13	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20
Dichloroethane,1,2,-		< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	NT	NT	NT	NT	NT	NT	< 0.81	< 0.20	< 0.81	< 0.20	NT	NT	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20
Dichloroethene,1,1,-		< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.52	< 0.13	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20
Dichloroethylene, cis-1,2,-		< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.37	< 0.094	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20
Tetrachloroethane,1,1,2,2,-		< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	1.2 J	0.18 J	< 1.4	< 0.20	< 1.4	< 0.20	< 0.82	< 0.12	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20
Tetrachloroethylene (PCE)		< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 0.95	< 0.14	< 1.4	< 0.20	3.2	0.47	< 1.4	< 0.20	< 1.4	< 0.20	2.1	0.31	< 1.4	< 0.20	< 1.4	< 0.20
Trichloroethane,1,1,1,- (TCA)		< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 0.76	< 0.14	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20
Trichloroethylene (TCE)		< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 0.70	< 0.13	< 1.1	< 0.20	0.54 J	0.10 J	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20

- General Notes:**
1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
 2. µg/m³ = micrograms per cubic meter.
 3. ppbv = parts per billion by volume.
 4. "<" = The analyte was not detected at a concentration above the specified laboratory reporting limit.
 5. FD = Field Duplicate.
 6. The samples collected in August 2009, November 2009, February 2010, November 2010, March 2011, and May 2015 were collected over a 24 hour period.
 - 7 NT = Not Tested.

- Qualifying Notes:**
- J The reported result is below the laboratory reporting limit and is estimated.
- J+ The reported result is estimated.

Table 6-2. Chemical Testing Results - Capuano Center Indoor and Outdoor Air
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

Sample Location: Sample ID:			Room 138																												
			RM138		150 GLEN-ROOM 138		150 GLEN-ROOM 138		150 GLEN-ROOM 138		150 GLEN-ROOM 138 (Alpha duplicate)		150 GLEN-RM 138		150 GLEN-RM 139 (FD-Room 138)		150GLEN-ROOM 138		150GLEN-ROOM 139 (FD-Room 138)		150 GLEN-ROOM 138		150GLEN-ROOM 139 (FD-Room 138)		150 GLEN-RM 138		150GLEN-ROOM 139 (FD-Room 138)		150GLEN-RM138		
			1/2/07		1/6/07		1/13/07		1/26/07		1/26/07		2/7/07		2/7/07		3/8/07		3/8/07		4/20/07		4/20/07		5/17/07		5/17/07		7/30/07		
Sample Date:		Units:		µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv		
Analyte	Method																														
Volatile Organic Compounds (VOCs)																															
Carbon tetrachloride	TO-15	< 1.3	< 0.20	0.49 J J+	0.078 J J+	0.82 J	0.13 J	0.82 J	0.13 J	< 0.126	< 0.020	0.75 J	0.12 J	0.52 J	0.082 J	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	0.61 J	0.097 J
Dichloroethane, 1,1-		0.45 J	0.11 J	0.77 J J+	0.19 J J+	0.57 J	0.14 J	0.65 J	0.16 J	< 0.081	< 0.020	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20
Dichloroethane, 1,2-		< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.079	< 0.020	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20
Dichloroethene, 1,1-		< 0.79	< 0.20	2.1 J+	0.54 J+	< 0.79	< 0.20	< 0.79	< 0.20	< 0.079	< 0.020	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20
Dichloroethylene, cis-1,2-		< 0.79	< 0.20	0.83 J+	0.21 J+	< 0.79	< 0.20	< 0.79	< 0.20	< 0.079	< 0.020	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20
Tetrachloroethane, 1,1,2,2-		< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4 J+	< 0.20 J+
Tetrachloroethylene (PCE)		14	2.0	60 J+	8.8 J+	20	3.0	20	3.0	32.6	4.8	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	1.2 J	0.17 J
Trichloroethane, 1,1,1,- (TCA)		< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 0.109	< 0.020	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20
Trichloroethylene (TCE)		2.3	0.42	7 J+	1.3 J+	3.1	0.57	3.3	0.61	4.26	0.794	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20

- General Notes:**
1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
 2. µg/m³ = micrograms per cubic meter.
 3. ppbv = parts per billion by volume.
 4. "<" = The analyte was not detected at a concentration above the specified laboratory reporting limit.
 5. FD = Field Duplicate.
 6. The samples collected in August 2009, November 2009, February 2010, November 2010, March 2011, and May 2015 were collected over a 24 hour period.
 7. NT = Not Tested.

- Qualifying Notes:**
- J The reported result is below the laboratory reporting limit and is estimated.
- J+ The reported result is estimated.

Table 6-2. Chemical Testing Results - Capuano Center Indoor and Outdoor Air
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

Sample Location: Sample ID:		Room 138 (continued)																													
		150GLEN-ROOM 139 (FD-Room 138)		150GLEN-RM138		150GLEN-ROOM 139 (FD-Room 138)		150GLEN-RM138		150GLEN-RM139 (FD-Room 138)		150GLEN-RM239 (FD-Room 138)		150GLEN-RM238 (FD-Room 138)		150GLEN-ROOM 139 (FD-Room 138)		150GLEN-RM238 (FD-Room 138)		150GLEN-RM239 (FD-Room 138)		150GLEN-RM138		150GLEN-RM139 (FD-Room 138)		150GLEN-RM138					
Sample Date: Units:		7/30/07		9/10/07		9/10/07		10/8/07		10/8/07		10/8/07		10/8/07		10/14/07		10/14/07		10/14/07		10/14/07		11/15/07		11/15/07		12/13/07			
		µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv		
Analyte		Method																													
Volatile Organic Compounds (VOCs)		TO-15																													
Carbon tetrachloride		0.69 J	0.11 J	0.69 J	0.11 J	0.69 J	0.11 J	0.69 J	0.11 J	0.88 J	0.14 J	0.82 J	0.13 J	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	0.59 J	0.094 J	0.62 J	0.099 J	0.69 J	0.11 J	0.69 J	0.11 J	0.57 J	0.091 J		
Dichloroethane, 1,1-		< 0.81 J+	< 0.20 J+	< 0.81 J+	< 0.20 J+	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20		
Dichloroethane, 1,2-		< 0.81 J+	< 0.20 J+	< 0.81 J+	< 0.20 J+	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20		
Dichloroethene, 1,1-		< 0.79 J+	< 0.20 J+	< 0.79 J+	< 0.20 J+	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20		
Dichloroethylene, cis-1,2-		< 0.79 J+	< 0.20 J+	< 0.79 J+	< 0.20 J+	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20		
Tetrachloroethane, 1,1,2,2-		< 1.4 J+	< 0.20 J+	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20		
Tetrachloroethylene (PCE)		1.1 J	0.16 J	< 1.4 J+	< 0.20 J+	6.5	0.96	< 1.4	< 0.20	1.5	0.22	1.2 J	0.18 J	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20		
Trichloroethane, 1,1,1- (TCA)		< 1.1 J+	< 0.20 J+	< 1.1 J+	< 0.20 J+	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20		
Trichloroethylene (TCE)		< 1.1 J+	< 0.20 J+	< 1.1 J+	< 0.20 J+	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20		

- General Notes:**
1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
 2. µg/m³ = micrograms per cubic meter.
 3. ppbv = parts per billion by volume.
 4. "<" = The analyte was not detected at a concentration above the specified laboratory reporting limit.
 5. FD = Field Duplicate.
 6. The samples collected in August 2009, November 2009, February 2010, November 2010, March 2011, and May 2015 were collected over a 24 hour period.
 7. NT = Not Tested.

- Qualifying Notes:**
- J The reported result is below the laboratory reporting limit and is estimated.
- J+ The reported result is estimated.

Table 6-2. Chemical Testing Results - Capuano Center Indoor and Outdoor Air
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

Sample Location: Sample ID:		Room 138 (continued)																											
		150GLEN-RM139 (FD-Room 138)		150GLEN-RM138		150GLEN-RM139 (FD-Room 138)		150GLEN-RM138		150GLEN-RM139 (FD-Room 138)		150GLEN-RM138		150GLEN-RM139 (FD-Room 138)		150GLEN-RM138		150GLEN-RM139 (FD-Room 138)		150GLEN-RM138		150GLEN-RM139 (FD-Room 138)		150GLEN-RM138		150GLEN-RM139 (FD-Room 138)		150GLEN-RM138	
		12/13/07		1/21/08		1/21/08		2/19/08		2/19/08		2/22/08		2/22/08		3/17/08		3/17/08		4/21/08		4/21/08		8/18/08		8/18/08		11/24/08	
Sample Date:		Units:																											
Analyte	Method	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv
Volatile Organic Compounds (VOCs)		TO-15																											
Carbon tetrachloride		< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	0.69 J	0.11 J	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	0.75 J	0.12 J	0.69 J	0.11 J	0.69 J	0.11 J	0.63 J	0.10 J	0.62 J	0.098 J
Dichloroethane, 1,1,-		< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20
Dichloroethane, 1,2,-		< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20
Dichloroethene, 1,1,-		< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20
Dichloroethylene, cis-1,2,-		< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20
Tetrachloroethane, 1,1,2,2,-		< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20
Tetrachloroethylene (PCE)		< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	1.8	0.27	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20
Trichloroethane, 1,1,1,- (TCA)		< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20
Trichloroethylene (TCE)		< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20

- General Notes:**
1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
 2. µg/m³ = micrograms per cubic meter.
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 6. The samples collected in August 2009, November 2009, February 2010, November 2010, March 2011, and May 2015 were collected over a 24 hour period.
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- J The reported result is below the laboratory reporting limit and is estimated.
- J+ The reported result is estimated.

Table 6-2. Chemical Testing Results - Capuano Center Indoor and Outdoor Air
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

Sample Location: Sample ID:		Room 138 (continued)																											
		150GLEN-RM139 (FD-Room 138)		150GLEN-RM138		150GLEN-RM139 (FD-Room 138)		150GLEN-RM138		150GLEN-RM139 (FD-Room 138)		150GLEN-RM138		150GLEN-RM139 (FD-Room 138)		150GLEN-RM138		150GLEN-RM139 (FD-Room 138)		150GLEN-RM138		150GLEN-RM139 (FD-Room 138)		150GLEN-RM138		150GLEN-RM139 (FD- Room 138)		150GLEN-RM138	
		11/24/08		3/2/09		3/2/09		8/27/09		8/27/09		11/11/09		11/11/09		2/19/10		2/19/10		11/11/10		11/11/10		3/17/11		3/17/11		5/23/15	
Sample Date:		Units:																											
Analyte	Method	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv
Volatile Organic Compounds (VOCs)		TO-15																											
Carbon tetrachloride		0.63 J	0.10 J	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Dichloroethane,1,1,-		< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.53	< 0.13	< 0.53	< 0.13	< 0.81	< 0.20
Dichloroethane,1,2,-		< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Dichloroethene,1,1,-		< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.52	< 0.13	< 0.52	< 0.13	< 0.79	< 0.20
Dichloroethylene, cis-1,2,-		< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.37	< 0.094	< 0.37	< 0.094	< 0.79	< 0.20
Tetrachloroethane,1,1,2,2,-		< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 0.82	< 0.12	< 0.82	< 0.12	< 1.4	< 0.20
Tetrachloroethylene (PCE)		< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 0.95	< 0.14	< 0.95	< 0.14	< 1.4	< 0.20
Trichloroethane,1,1,1,- (TCA)		< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 0.76	< 0.14	< 0.76	< 0.14	< 1.1	< 0.20
Trichloroethylene (TCE)		< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 0.70	< 0.13	< 0.70	< 0.13	< 1.1	< 0.20

- General Notes:**
1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
 2. µg/m³ = micrograms per cubic meter.
 3. ppbv = parts per billion by volume.
 4. "<" = The analyte was not detected at a concentration above the specified laboratory reporting limit.
 5. FD = Field Duplicate.
 6. The samples collected in August 2009, November 2009, February 2010, November 2010, March 2011, and May 2015 were collected over a 24 hour period.
 7. NT = Not Tested.

- Qualifying Notes:**
- J The reported result is below the laboratory reporting limit and is estimated.
- J+ The reported result is estimated.

Table 6-2. Chemical Testing Results - Capuano Center Indoor and Outdoor Air
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

Sample Location: Sample ID:		Room 141																													
		150 GLEN-ROOM 141		150GLEN-ROOM 141		150 GLEN-ROOM 141		150 GLEN-RM 141		150GLEN-RM141		150GLEN-RM141		150GLEN-RM141		150GLEN-RM141		150GLEN-RM141		150GLEN-RM141		150GLEN-RM141		150GLEN-RM141		150GLEN-RM141		150GLEN-RM141			
Sample Date:		1/6/07		3/8/07		4/20/07		5/17/07		7/30/07		9/10/07		10/8/07		10/14/07		11/15/07		12/13/07		1/21/08		2/19/08		2/22/08		3/17/08			
Units:		µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv		
Analyte	Method																														
Volatile Organic Compounds (VOCs)		TO-15																													
Carbon tetrachloride		0.45 J J+	0.071 J J+	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3 J+	< 0.20 J+	0.75 J	0.12 J	< 1.3	< 0.20	< 1.3	< 0.20	0.69 J	0.11 J	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	0.69 J	0.11 J	< 1.3	< 0.20
Dichloroethane, 1,1-		< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81 J+	< 0.20 J+	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20
Dichloroethane, 1,2-		< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81 J+	< 0.20 J+	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20
Dichloroethene, 1,1-		< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79 J+	< 0.20 J+	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20
Dichloroethylene, cis-1,2-		< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79 J+	< 0.20 J+	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20
Tetrachloroethane, 1,1,2,2-		< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4 J+	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20
Tetrachloroethylene (PCE)		< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4 J+	< 0.20 J+	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20
Trichloroethane, 1,1,1,- (TCA)		< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1 J+	< 0.20 J+	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20
Trichloroethylene (TCE)		< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1 J+	< 0.20 J+	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20

- General Notes:**
1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
 2. µg/m³ = micrograms per cubic meter.
 3. ppbv = parts per billion by volume.
 4. "<" = The analyte was not detected at a concentration above the specified laboratory reporting limit.
 5. FD = Field Duplicate.
 6. The samples collected in August 2009, November 2009, February 2010, November 2010, March 2011, and May 2015 were collected over a 24 hour period.
 - 7 NT = Not Tested.

- Qualifying Notes:**
- J The reported result is below the laboratory reporting limit and is estimated.
- J+ The reported result is estimated.

Table 6-2. Chemical Testing Results - Capuano Center Indoor and Outdoor Air
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

Sample Location: Sample ID:		Room 141 (continued)																Room 142													
		150GLEN-RM141		150GLEN-RM141		150GLEN-RM141		150GLEN-RM141		150GLEN-RM141		150GLEN-RM141		150GLEN-RM141		150GLEN-RM141		RM142		150 GLEN-ROOM 142		150 GLEN-RM 142		150GLEN-ROOM 142		150 GLEN-ROOM 142		150 GLEN-RM 142		150GLEN-RM142	
Sample Date: Units:		4/21/08		8/18/08		11/24/08		3/2/09		8/27/09		2/19/10		11/11/10		3/17/11		1/2/07		1/6/07		2/7/07		3/8/07		4/20/07		5/17/07		7/30/07	
		µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv
Volatile Organic Compounds (VOCs)		TO-15																													
Carbon tetrachloride		0.69 J	0.11 J	0.60 J	0.096 J	0.63 J	0.10 J	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	NT	NT	NT	NT	< 1.3	< 0.20	0.52 J J+	0.083 J J+	0.82 J	0.13 J	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	0.63 J	0.10 J
Dichloroethane,1,1-		< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.53	< 0.13	1.4	0.35	1.2 J+	0.29 J+	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20
Dichloroethane,1,2-		< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	NT	NT	NT	NT	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	1.0	0.25
Dichloroethene,1,1-		< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.52	< 0.13	0.87	0.22	2.5 J+	0.63 J+	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20
Dichloroethylene, cis-1,2-		< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.37	< 0.094	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20
Tetrachloroethane,1,1,2,2-		< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 0.82	< 0.12	< 1.4	< 0.20	< 1.4 J+	< 0.20 J+	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20
Tetrachloroethylene (PCE)		< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 0.95	< 0.14	28	4.1	45 J+	6.6 J+	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20
Trichloroethane,1,1,1- (TCA)		< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 0.76	< 0.14	< 1.1	< 0.20	0.33 J J+	0.061 J J+	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20
Trichloroethylene (TCE)		< 1.1	< 0.20	0.62 J	0.092 J	0.62 J	0.092 J	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 0.70	< 0.13	3.7	0.69	5.4 J+	1 J+	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20

- General Notes:**
1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
 2. µg/m³ = micrograms per cubic meter.
 3. ppbv = parts per billion by volume.
 4. "<" = The analyte was not detected at a concentration above the specified laboratory reporting limit.
 5. FD = Field Duplicate.
 6. The samples collected in August 2009, November 2009, February 2010, November 2010, March 2011, and May 2015 were collected over a 24 hour period.
 7. NT = Not Tested.

- Qualifying Notes:**
- J The reported result is below the laboratory reporting limit and is estimated.
- J+ The reported result is estimated.

Table 6-2. Chemical Testing Results - Capuano Center Indoor and Outdoor Air
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

Sample Location: Sample ID:		Room 142 (cont)																											
		150GLEN-RM142		150GLEN-RM142		150GLEN-RM142		150GLEN-RM142		150GLEN-RM142		150GLEN-RM142		150GLEN-RM142		150GLEN-RM142		150GLEN-RM142		150GLEN-RM142		150GLEN-RM142		150GLEN-RM142		150GLEN-RM142		150GLEN-RM142	
		9/10/07		10/8/07		10/14/07		11/15/07		12/13/07		1/21/08		2/19/08		2/22/08		3/17/08		4/21/08		8/18/08		11/24/08		3/2/09		8/27/09	
Sample Date:		Units:		µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv
Analyte	Method	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv
Volatile Organic Compounds (VOCs)		TO-15																											
Carbon tetrachloride		0.75 J	0.12 J	< 1.3	< 0.20	< 1.3	< 0.20	0.69 J	0.11 J	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	0.75 J	0.12 J	< 1.3	< 0.20	0.69 J	0.11 J	< 1.3	< 0.20	0.69 J	0.11 J	< 1.3	< 0.20	< 1.3	< 0.20
Dichloroethane, 1,1-		< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20
Dichloroethane, 1,2-		< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20
Dichloroethene, 1,1-		< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20
Dichloroethylene, cis-1,2-		< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20
Tetrachloroethane, 1,1,2,2-		< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20
Tetrachloroethylene (PCE)		< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20
Trichloroethane, 1,1,1- (TCA)		< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20
Trichloroethylene (TCE)		< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20

- General Notes:**
1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
 2. µg/m³ = micrograms per cubic meter.
 3. ppbv = parts per billion by volume.
 4. "<" = The analyte was not detected at a concentration above the specified laboratory reporting limit.
 5. FD = Field Duplicate.
 6. The samples collected in August 2009, November 2009, February 2010, November 2010, March 2011, and May 2015 were collected over a 24 hour period.
 - 7 NT = Not Tested.

- Qualifying Notes:**
- J The reported result is below the laboratory reporting limit and is estimated.
- J+ The reported result is estimated.

Table 6-2. Chemical Testing Results - Capuano Center Indoor and Outdoor Air
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

Sample Location: Sample ID:		Room 142 (continued)								Room 144				Room 145		Room 146															
		150GLEN-RM142		150GLEN-RM142		150GLEN-RM142		150GLEN-RM142		150 GLEN-ROOM 144		144 (Alpha duplicate)		150 GLEN-ROOM 145		150 GLEN-ROOM 146A		150 GLEN-ROOM 146B		150 GLEN-ROOM 146B (FD-Room 146)		RM146		150 GLEN-ROOM 146		150 GLEN-RM 146		150GLEN-ROOM 146		150 GLEN-ROOM 146	
		2/19/10		11/11/10		3/17/11		5/23/15		1/13/07		1/13/07		1/6/07		12/27/06		12/28/06		12/28/06		1/2/07		1/6/07		2/7/07		3/8/07		4/20/07	
Sample Date:		Units:		µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv
Analyte	Method																														
Volatile Organic Compounds (VOCs)		TO-15																													
Carbon tetrachloride		< 1.3	< 0.20	NT	NT	NT	NT	NT	NT	0.88 J	0.14 J	< 3.14	< 0.50	0.45 J J+	0.071 J J+	1.1 J	0.18 J	< 1.3	< 0.20	0.49 J	0.078 J	0.63 J	0.10 J	< 1.3	< 0.20	0.75 J	0.12 J	< 1.3	< 0.20	< 1.3	< 0.20
Dichloroethane, 1,1-		< 0.81	< 0.20	< 0.81	< 0.20	< 0.53	< 0.13	< 0.81	< 0.20	< 0.81	< 0.20	< 2.02	< 0.50	< 0.81	< 0.20	10	2.5	3.6	0.88	3.3	0.82	0.53 J	0.13 J	0.57 J J+	0.14 J J+	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20
Dichloroethane, 1,2-		< 0.81	< 0.20	NT	NT	NT	NT	NT	NT	< 0.81	< 0.20	< 1.98	< 0.50	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20
Dichloroethene, 1,1-		< 0.79	< 0.20	< 0.79	< 0.20	< 0.52	< 0.13	< 0.79	< 0.20	< 0.79	< 0.20	< 1.98	< 0.50	< 0.79	< 0.20	7.9	2.0	4.0	1.0	3.9	0.99	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20
Dichloroethylene, cis-1,2-		< 0.79	< 0.20	< 0.79	< 0.20	< 0.37	< 0.094	< 0.79	< 0.20	< 0.79	< 0.20	< 2.02	< 0.50	< 0.79	< 0.20	3.3	0.83	1.3	0.33	1.2	0.31	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 2.0	< 0.50	< 0.79	< 0.20
Tetrachloroethane, 1,1,2,2-		< 1.4	< 0.20	< 1.4	< 0.20	< 0.82	< 0.12	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20
Tetrachloroethylene (PCE)		< 1.4	< 0.20	< 1.4	< 0.20	< 0.95	< 0.14	< 1.4	< 0.20	4.1	0.61	4.36	0.643	< 1.4	< 0.20	186	27.5	83.4	12.3	85.4	12.6	11	1.6	26 J+	3.8 J+	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20
Trichloroethane, 1,1,1- (TCA)		< 1.1	< 0.20	< 1.1	< 0.20	< 0.76	< 0.14	< 1.1	< 0.20	< 1.1	< 0.20	< 2.72	< 0.50	< 1.1	< 0.20	2.1	0.38	0.82 J	0.15 J	0.71 J	0.13 J	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20
Trichloroethylene (TCE)		< 1.1	< 0.20	< 1.1	< 0.20	< 0.70	< 0.13	< 1.1	< 0.20	1.3	0.24	< 2.68	< 0.50	< 1.1	< 0.20	37	6.8	10	1.9	11	2.1	1.7	0.32	3.0 J+	0.56 J+	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20

- General Notes:**
1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
 2. µg/m³ = micrograms per cubic meter.
 3. ppbv = parts per billion by volume.
 4. "<" = The analyte was not detected at a concentration above the specified laboratory reporting limit.
 5. FD = Field Duplicate.
 6. The samples collected in August 2009, November 2009, February 2010, November 2010, March 2011, and May 2015 were collected over a 24 hour period.
 7. NT = Not Tested.

- Qualifying Notes:**
- J The reported result is below the laboratory reporting limit and is estimated.
- J+ The reported result is estimated.

Table 6-2. Chemical Testing Results - Capuano Center Indoor and Outdoor Air
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

Sample Location: Sample ID:		Room 146 (continued)																											
		150 GLEN-RM 146		150GLEN-RM146		150GLEN-RM146		150GLEN-RM146		150GLEN-RM146		150GLEN-RM146		150GLEN-RM146		150GLEN-RM146		150GLEN-RM146		150GLEN-RM146		150GLEN-RM146		150GLEN-RM146		150GLEN-RM146		150GLEN-RM146	
		5/17/07		7/30/07		9/10/07		10/8/07		10/14/07		11/15/07		12/13/07		1/21/08		2/19/08		2/22/08		3/17/08		4/21/08		8/18/08		11/24/08	
Sample Date: Units:		µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv
Analyte	Method																												
Volatile Organic Compounds (VOCs)	TO-15																												
Carbon tetrachloride		< 1.3	< 0.20	0.62 J	0.099 J	0.82 J	0.13 J	< 1.3	< 0.20	0.58 J	0.092 J	0.69 J	0.11 J	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	0.62 J	0.098 J	< 1.3	< 0.20	0.75 J	0.12 J	0.60 J	0.096 J	0.63 J	0.10 J
Dichloroethane,1,1,-		< 0.81	< 0.20	< 0.81 J+	< 0.20 J+	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20
Dichloroethane,1,2,-		< 0.81	< 0.20	< 0.81 J+	< 0.20 J+	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	0.49 J	0.12 J	< 0.81	< 0.20
Dichloroethene,1,1,-		< 0.79	< 0.20	< 0.79 J+	< 0.20 J+	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20
Dichloroethylene, cis-1,2,-		< 0.79	< 0.20	< 0.79 J+	< 0.20 J+	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20
Tetrachloroethane,1,1,2,2,-		< 1.4	< 0.20	< 1.4 +	< 0.20 J+	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20
Tetrachloroethylene (PCE)		< 1.4	< 0.20	1.0 J	0.15 J	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20
Trichloroethane,1,1,1,- (TCA)		< 1.1	< 0.20	< 1.1 J+	< 0.20 J+	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20
Trichloroethylene (TCE)		< 1.1	< 0.20	< 1.1 J+	< 0.20 J+	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20

- General Notes:**
1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
 2. µg/m³ = micrograms per cubic meter.
 3. ppbv = parts per billion by volume.
 4. "<" = The analyte was not detected at a concentration above the specified laboratory reporting limit.
 5. FD = Field Duplicate.
 6. The samples collected in August 2009, November 2009, February 2010, November 2010, March 2011, and May 2015 were collected over a 24 hour period.
 - 7 NT = Not Tested.

- Qualifying Notes:**
- J The reported result is below the laboratory reporting limit and is estimated.
- J+ The reported result is estimated.

Table 6-2. Chemical Testing Results - Capuano Center Indoor and Outdoor Air
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

Sample Location: Sample ID:		Room 146 (continued)														Outside of School by Room 126 Window						Outside of School by Day Care Window					
		150GLEN-RM146		150GLEN-RM146		150GLEN-RM146		150GLEN-RM146		150GLEN-RM146		150GLEN-RM146		150GLEN-RM146		150 GLEN-0-1A		150 GLEN-0-1B		150 GLEN-0-1A		150 GLEN-0-2A		150 GLEN-0-2B		150 GLEN-0-2A	
		3/2/09		8/27/09		11/11/09		2/19/10		11/11/10		3/17/11		5/23/15		12/27/06		12/28/06		1/6/07		12/27/06		12/28/06		1/6/07	
Analyte	Method	Units:		µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv
Volatile Organic Compounds (VOCs)		TO-15		< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	NT	NT	NT	NT	< 1.3	< 0.20	< 1.3	< 0.20	0.52 J J+	0.083 J J+	1.1 J	0.17 J	< 1.3	< 0.20	0.52 J J+	0.082 J J+
Carbon tetrachloride				< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.53	< 0.13	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20
Dichloroethane,1,1,-				< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	NT	NT	NT	NT	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20
Dichloroethane,1,2,-				< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.52	< 0.13	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20
Dichloroethene,1,1,-				< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.37	< 0.094	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20
Dichloroethylene, cis-1,2,-				< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 0.82	< 0.12	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20
Tetrachloroethane,1,1,2,2,-				< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 0.95	< 0.14	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20
Tetrachloroethylene (PCE)				< 1.1	< 0.20	0.93 J	0.17 J	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 0.76	< 0.14	< 1.1	< 0.20	< 1.2	< 0.21	< 1.2	< 0.21	< 1.2	< 0.21	< 1.2	< 0.21	< 1.2	< 0.21
Trichloroethane,1,1,1,- (TCA)				< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 0.70	< 0.13	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20
Trichloroethylene (TCE)				< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 0.70	< 0.13	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20

- General Notes:**
1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
 2. µg/m³ = micrograms per cubic meter.
 3. ppbv = parts per billion by volume.
 4. "<" = The analyte was not detected at a concentration above the specified laboratory reporting limit.
 5. FD = Field Duplicate.
 6. The samples collected in August 2009, November 2009, February 2010, November 2010, March 2011, and May 2015 were collected over a 24 hour period.
 - 7 NT = Not Tested.

- Qualifying Notes:**
- J The reported result is below the laboratory reporting limit and is estimated.
- J+ The reported result is estimated.

Table 6-2. Chemical Testing Results - Capuano Center Indoor and Outdoor Air
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

Sample Location: Sample ID:		Downwind on Roof																							
		150 GLEN-ROOF B		150 GLEN-ROOF B		150GLEN-ROOF		150 GLEN-ROOF		150 GLEN-ROOF		150GLEN-ROOF		150GLEN-ROOF		150GLEN-ROOF		150GLEN-ROOF		150GLEN-ROOF		150GLEN-ROOF		150GLEN-ROOF	
		2/8/07		2/8/07		3/8/07		4/20/07		5/17/07		8/9/07		9/10/07		10/14/07		11/14/07		12/17/07		1/21/08		2/19/08	
Sample Date:		Units:																							
Analyte	Method	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
Volatile Organic Compounds (VOCs)		TO-15																							
Carbon tetrachloride		< 1.3	< 1.3	< 0.20	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	0.69 J	0.11 J	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20
Dichloroethane,1,1,-		< 0.81	< 0.81	< 0.20	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20
Dichloroethane,1,2,-		< 0.81	< 0.81	< 0.20	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20
Dichloroethene,1,1,-		< 0.79	< 0.79	< 0.20	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20
Dichloroethylene, cis-1,2,-		< 0.79	< 0.79	< 0.20	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20
Tetrachloroethane,1,1,2,2,-		< 1.4	< 1.4	< 0.20	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20
Tetrachloroethylene (PCE)		< 1.4	< 1.4	< 0.20	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20
Trichloroethane,1,1,1,- (TCA)		< 1.2	< 1.2	< 0.21	< 0.21	< 1.2	< 0.21	< 1.2	< 0.21	< 1.2	< 0.21	< 1.2	< 0.21	< 1.2	< 0.21	< 1.2	< 0.21	< 1.2	< 0.21	< 1.2	< 0.21	< 1.2	< 0.21	< 1.2	< 0.21
Trichloroethylene (TCE)		< 1.1	< 1.1	< 0.20	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20

- General Notes:**
1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
 2. µg/m³ = micrograms per cubic meter.
 3. ppbv = parts per billion by volume.
 4. "<" = The analyte was not detected at a concentration above the specified laboratory reporting limit.
 5. FD = Field Duplicate.
 6. The samples collected in August 2009, November 2009, February 2010, November 2010, March 2011, and May 2015 were collected over a 24 hour period.
 - 7 NT = Not Tested.

- Qualifying Notes:**
- J The reported result is below the laboratory reporting limit and is estimated.
- J+ The reported result is estimated.

Table 6-2. Chemical Testing Results - Capuano Center Indoor and Outdoor Air
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

Sample Location: Sample ID:		Downwind on Roof (cont)											
		150GLEN-ROOF		150GLEN-ROOF		150GLEN-ROOF		150GLEN-ROOF		150GLEN-ROOF		150GLEN-ROOF	
		3/17/08		4/21/08		8/18/08		11/24/08		8/27/09		11/11/09	
Sample Date: Units:		µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
Analyte	Method												
Volatile Organic Compounds (VOCs)	TO-15												
Carbon tetrachloride		< 1.3	< 0.20	0.69 J	0.11 J	0.63 J	0.10 J	0.63 J	0.10 J	< 1.3	< 0.20	< 1.3	< 0.20
Dichloroethane, 1,1-		< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20
Dichloroethane, 1,2-		< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20
Dichloroethene, 1,1-		< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20
Dichloroethylene, cis-1,2-		< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20
Tetrachloroethane, 1,1,2,2-		< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20
Tetrachloroethylene (PCE)		< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20
Trichloroethane, 1,1,1,- (TCA)		< 1.2	< 0.21	< 1.2	< 0.21	< 1.2	< 0.21	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20
Trichloroethylene (TCE)		< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20

- General Notes:**
1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
 2. µg/m³ = micrograms per cubic meter.
 3. ppbv = parts per billion by volume.
 4. "<" = The analyte was not detected at a concentration above the specified laboratory reporting limit.
 5. FD = Field Duplicate.
 6. The samples collected in August 2009, November 2009, February 2010, November 2010, March 2011, and May 2015 were collected over a 24 hour period.
 - 7 NT = Not Tested.

- Qualifying Notes:**
- J The reported result is below the laboratory reporting limit and is estimated.
- J+ The reported result is estimated.

Table 7-1. Exposure Pathway Mitigation Measure (EPMM) Status
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

Property Address	EPMM Design Option	Date Completed or Last Modified	Date of Last Indoor Air Monitoring	Construction Details													
				Ventilation Fan(s) (Model No.) ^(a)	Fan Replacement Date	Number of Sub-Slab Vapor Extraction Points (SSDS)	Sub-slab Vapor Barrier - HDPE Liner	Sub-Slab Ventilation System - Geocomposite	Sub-Slab Vapor Trench	Foundation Wall Ventilation System - Geocomposite	New Basement Slab Installed	Crawlspace Vapor Barrier	Epoxy Vapor Barrier - Floor	Epoxy Vapor Barrier - Foundation Walls	Telemetry Installed (if necessary)	Reason Telemetry not installed (if applicable)	AUL Recorded (Yes/No)
91-93 Franklin Street	3	March, 2009	2/28/2025	-	-	-	Yes	Yes	-	-	Yes	-	Yes	Yes	-	-	Yes
95 Franklin Street	2/1 ^(b)	May, 2011	5/16/2013	GP-501	-	2	-	-	Yes	-	-	Yes	Yes	Yes	Yes	-	No
95R Franklin Street	2	December, 2007	3/8/2010	-	-	-	-	-	Yes	Yes	-	Yes	Yes	Yes	-	-	Yes
150 Glen Street (Capuano Center)	1	April, 2015	5/23/2015	GP-501 (3)	August, 2023	18	-	-	-	-	-	-	-	-	Yes	-	No
163 Glen Street	2 ^(c)	July, 2018	8/18/2020	-	-	-	Yes	-	Yes	-	Yes	-	-	-	-	-	No
166-168 Glen Street	3	November, 2010	2/21/2025	-	-	-	Yes	Yes	-	-	Yes	Yes	Yes	Yes	-	-	Yes
9 Knowlton Street	1	January, 2010	3/23/2023	GP-501	April, 2024	5	-	-	-	-	-	-	-	-	No	Refused access	Yes
13 Knowlton Street	1	January, 2010	1/10/2023	GP-501	March, 2018	4	-	-	-	-	-	-	-	-	Yes	-	Yes
17 Knowlton Street	3	March, 2009	3/6/2025	-	-	-	Yes	Yes	-	-	Yes	-	Yes	Yes	-	-	Yes
31-33 Knowlton Street	1	February, 2008	3/19/2010	GP-501	May, 2024	7	-	-	-	-	-	-	-	-	Yes	-	No
32 Knowlton Street	3	May, 2009	2/28/2025	-	-	-	-	-	-	-	-	-	-	-	-	-	Yes
34 Knowlton Street	4	June, 2014	4/9/2025	-	-	-	Yes	-	-	-	Yes	-	-	-	-	-	Yes
35-37 Knowlton Street	3/1 ^(b)	April, 2010	3/11/2011	GP-501	December, 2019	4	Yes	Yes	-	-	Yes	-	Yes	Yes	Yes	-	No
4 Morton Street	3	November, 2008	3/20/2012	-	-	-	Yes	Yes	-	-	Yes	-	Yes	Yes	-	-	No
10 Morton Street	4 ^(e)	September, 2024	3/18/2025	-	-	-	Yes	Yes	-	-	Yes	-	Yes	Yes	-	-	Yes
11 Morton Street	2	November, 2008	5/7/2025	-	-	-	-	-	Yes	Yes	-	-	Yes	Yes	-	-	Yes
12 Morton Street	3	March, 2008	11/19/2010	-	-	-	Yes	Yes	-	-	Yes	-	Yes	Yes	-	-	Yes
13 Morton Street	1	October, 2008	9/17/2014	GP-501	November, 2023	5	-	-	-	-	-	-	-	-	Yes	-	No
18 Morton Street	1	July, 2007	2/24/2011	GP-501	June, 2023	5	-	-	-	-	-	-	-	-	Yes	-	No
19-19A Morton Street	3	August, 2009	2/27/2025	-	-	-	-	-	-	-	-	-	-	-	-	-	Yes
23 Tufts Street	1	May, 2007	2/25/2010	GP-501	-	1	-	-	-	-	-	-	-	-	Yes	-	No
27 Tufts Street	3/1 ^(b)	May, 2011	5/23/2013	GP-501	-	3	Yes	Yes	-	-	Yes	Yes	Yes	Yes	Yes	-	No
31 Tufts Street	4	October, 2022	2/19/2025	-	-	-	Yes	Yes	-	-	Yes	-	-	-	-	-	No
50 Tufts Street	1	August, 2007	3/11/2015	Regenerative Blower	-	22	-	-	-	-	-	-	Yes	-	Yes	-	No
60 Tufts Street	1	April, 2009	4/25/2019	Regenerative Blower	-	14	-	-	-	-	-	-	-	-	Yes	-	No
103 Washington Street	(d)			-	-	-	-	-	-	-	-	-	-	-	-	-	No
121 Washington	4	TBD		-	-	-	Yes	Yes	-	-	Yes	-	-	-	-	-	No

General Notes:

1. NS = Not sampled.
2. - = Not Applicable.

Footnotes:

- (a) Ventilation fans manufactured by Radon Away.
- (b) An Option 2 or 3 EPMM was initially installed at these properties; however, a fan was added to the EPMM to improve performance. Therefore, these EPMMs consist of Option 1 with Option 2 or 3 EPMM elements.
- (c) EPMM demonstrated to be no longer required based on testing requirements in the MassDEP Vapor Intrusion Guidance: Site Assessment, Mitigation and Closure, Policy #WSC-16-435 (Section 3.7 and Tables 3-1 and 3-2).
- (d) EPMM eliminated during demolition and not installed in redevelopment
- (e) An Option 3 EPMM was initially installed at 10 Morton Street in March 2009; however, a new EPMM was installed during renovations.

Table 7-2. Indoor Air Sampling and EPMM Monitoring - December 16, 2024 through June 15, 2025
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
Residential and Commercial Properties
Somerville, Massachusetts

Property	Property Type	Indoor Air Sampling	EPMM Inspection
84 Franklin Street	Residential	05/07/25	--
91-93 Franklin Street	Residential	02/28/25	NA
95 Franklin Street	Residential	Not Sampled	NA
95R Franklin Street	Residential	Not Sampled	NA
97 Franklin Street	Residential	2/19/2025	--
156 Glen Street	Residential	02/19/25	--
163 Glen Street	Residential	Not Sampled	NA
166-168 Glen Street	Residential	02/21/25	NA
9 Knowlton Street	Residential	Not Sampled	NA
13 Knowlton Street	Residential	Not Sampled	NA
17 Knowlton Street	Residential	03/06/25	NA
32 Knowlton Street	Residential	02/28/25	NA
34 Knowlton Street	Residential	2/25/2025 and 4/9/2025	NA
31-33 Knowlton Street	Residential	Not Sampled	NA
35-37 Knowlton Street	Residential	Not Sampled	NA
4 Morton Street	Residential	Not Sampled	NA
10 Morton Street	Residential	3/18/2025	NA
11 Morton Street	Residential	4/8/2025 and 5/7/2025	NA
12 Morton Street	Residential	Not Sampled	NA
13 Morton Street	Residential	Not Sampled	NA
18 Morton Street	Residential	Not Sampled	NA
19-19A Morton Street	Residential	2/27/2025	NA
21 Morton Street	Residential	2/19/2025	--
23 Tufts Street	Residential	Not Sampled	NA
27 Tufts Street	Residential	Not Sampled	2/20/2025
31 Tufts Street	Residential	2/19/2025	NA
103 Washington	Residential	2/11/2025 and 2/21/2025	--
105-107 Washington Street	Residential	2/11/2025	--

General Notes:

1. EPMM = Exposure Pathway Mitigation Measure.
2. See Appendix E for Air Sampling Checklists and Appendix H for EPMM forms.
3. See Section 6 for a description of EPMM Inspection activities. 60 Tufts Street EPMM is inspected quarterly; see Section 7.
4. NA = No inspection was performed during this reporting period.
5. SSDS = Sub-slab depressurization system.
6. Properties identified with -- indicates no EPMM installed

Table 8-1. Summary of SSDS Monitoring Events - 60 Tufts Street
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

Monitoring Date	Monitoring Event per RMR Report Period	Type of Monitoring Event	SSDS Field Parameters Measured	Analytical Samples Collected (Yes/No)?
1/8/2025	1	SSDS Quarterly Monitoring	-Pressure readings and VOC concentrations at system influent/effluent and blower. -System flow rate.	No
4/24/2025	2	SSDS Quarterly Monitoring	-Pressure readings and VOC concentrations at system influent/effluent and blower. -System flow rate.	No

General Notes:

1. SSDS = Sub-Slab Depressurization System.
2. RMR = Remedial Monitoring Report.
3. VOC = Volatile Organic Compound.
4. VOC measurements collected with a ppm-RAE calibrated to 100 ppm isobutylene gas.
5. Pressure readings collected using a Dwyer 475-000-FM manometer.

Table 9-1. Summary of SSDS Monitoring Events - 50 Tufts Street
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
50 Tufts Street
Somerville, Massachusetts

Monitoring Date	Monitoring Event per RMR Report Period	Type of Monitoring Event	SSDS Field Parameters Measured	Analytical Samples Collected (Yes/No)?
1/8/2025	1	SSDS Quarterly Monitoring	-Pressure readings and VOC concentrations at the combined influent, and effluent pipes. -Pressure readings and VOC concentrations at carbon tanks. -System flow rate.	No
2/11/2025	2	SSDS Monthly Monitoring	-VOC concentrations at the combined influent, and effluent pipes. -VOC concentrations at carbon tanks.	No
3/6/2025	3	SSDS Monthly Monitoring	-VOC concentrations at the combined influent, and effluent pipes. -VOC concentrations at carbon tanks.	No
4/24/2025	4	SSDS Quarterly Monitoring	-Pressure readings and VOC concentrations at the combined influent, and effluent pipes. -Pressure readings and VOC concentrations at carbon tanks. -System flow rate.	No
5/13/2025	5	SSDS Monthly Monitoring	-VOC concentrations at the combined influent, and effluent pipes. -VOC concentrations at carbon tanks.	No
6/13/2025	6	SSDS Monthly Monitoring	-VOC concentrations at the combined influent, and effluent pipes. -VOC concentrations at carbon tanks.	No

General Notes:

1. SSDS = Sub-Slab Depressurization System.
2. RMR = Remedial Monitoring Report.
3. VOC = Volatile Organic Compound.
4. VFD = Variable Flow Drive.
5. SVT/SVE = Soil Vapor Temporary Point/Soil Vapor Extraction.
6. VOC measurements collected with a ppm-RAE calibrated to 100 parts per million (ppm) with 10.6V lamp.
7. Pressure readings collected using a Dwyer 475-000-FM manometer.

Figures

Figure 1-1 Site Location Map

Figure 1-2 Disposal Site Map and Site Boundary

Figure 2-1 2024 Shallow Plume Conditions

**Figure 2-2 Kleinfelder Soil Data and GLX Project Soil Pre-Characterization
Samples**

Figure 4-1 Monitoring Well Locations

Figure 4-2 Proposed Monitoring Well Locations

Figure 5-1 Sub-Slab Soil Vapor and Indoor Air Sampling

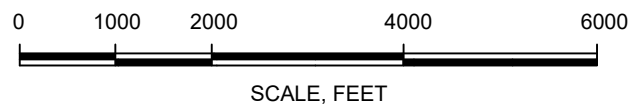
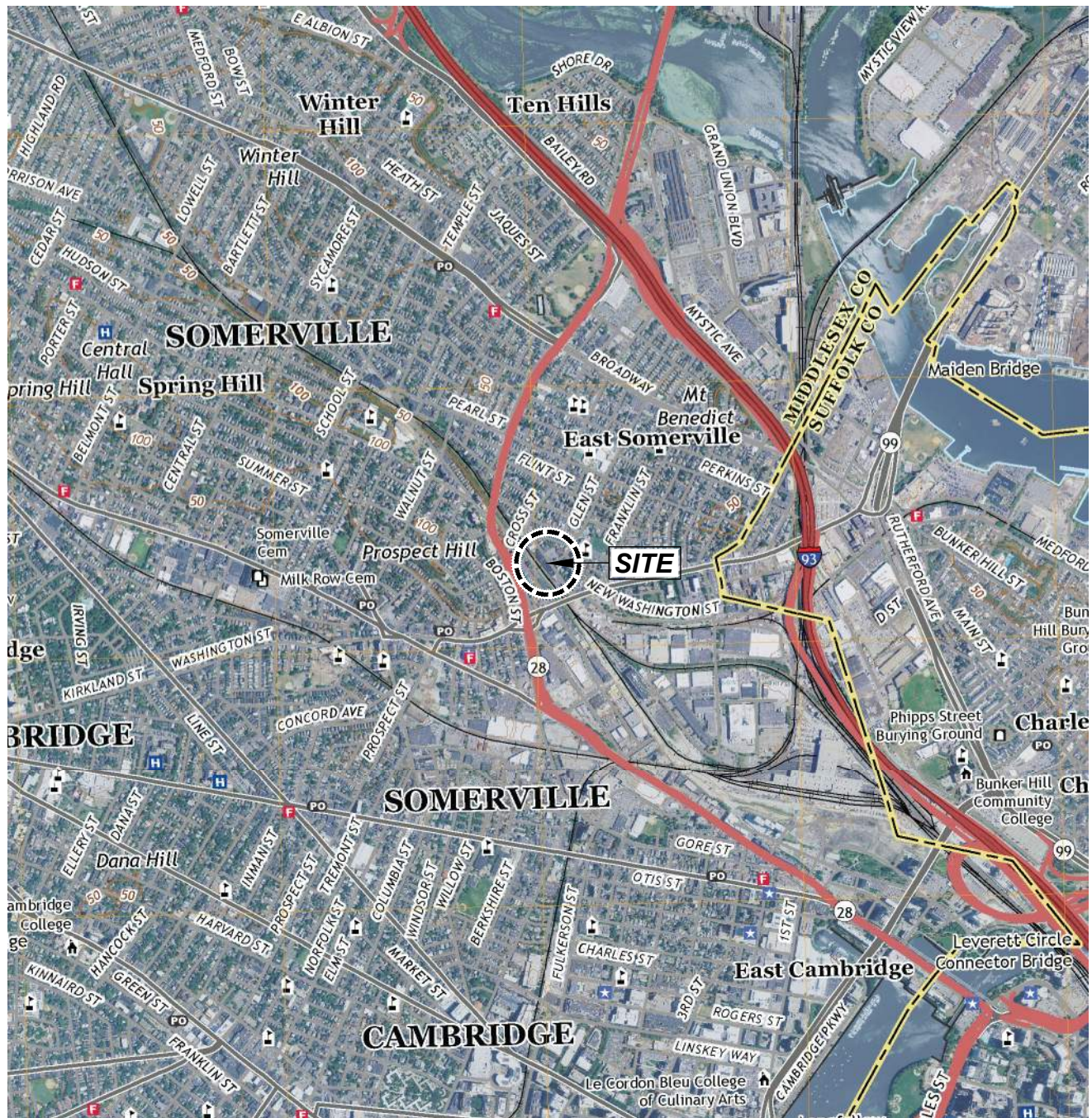
Figure 7-1 EPMM Installation Progress

Figure 7-2 EPMM Mitigation Flow Chart

Figure 7-3 Permanent Solution Status

Figure 9-1 Combined Influent VOC Concentrations and Cumulative VOC Removal

Figure 11-1 50 Tufts Street Shallow Soil Boring Plan



This Image is from U.S.G.S. Topographic 7.5 Minute Series
 Boston North, MA Quadrangle, 2018.
 Datum is North American Vertical Datum of 1988 (NAVD88).
 Contour Interval is 10 Feet.



Phase V Status Report No. 28 and
 Remedial Monitoring Report No. 43
 50 Tufts Street Somerville, Massachusetts

UniFirst Corporation
 Wilmington, Massachusetts

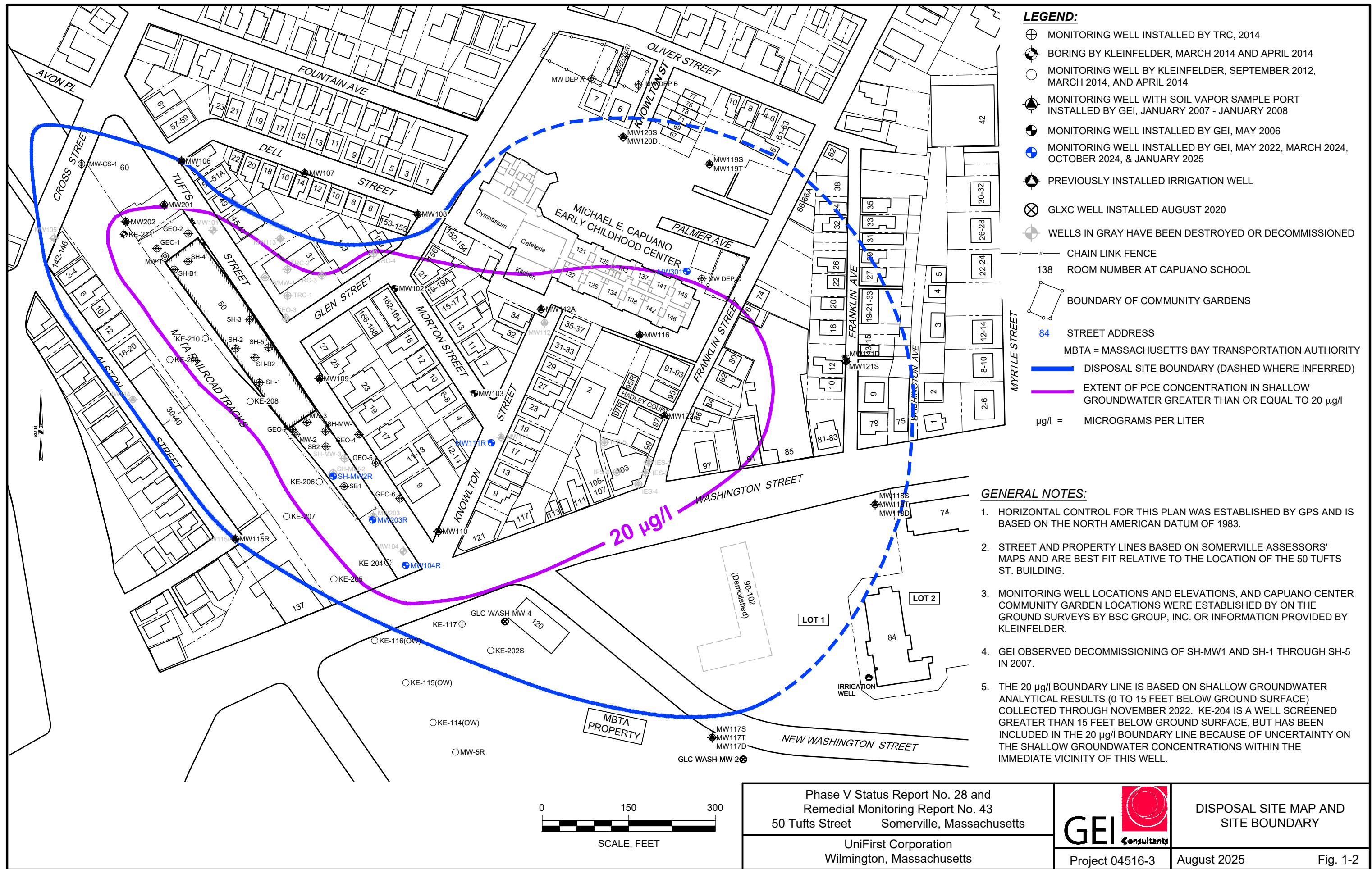


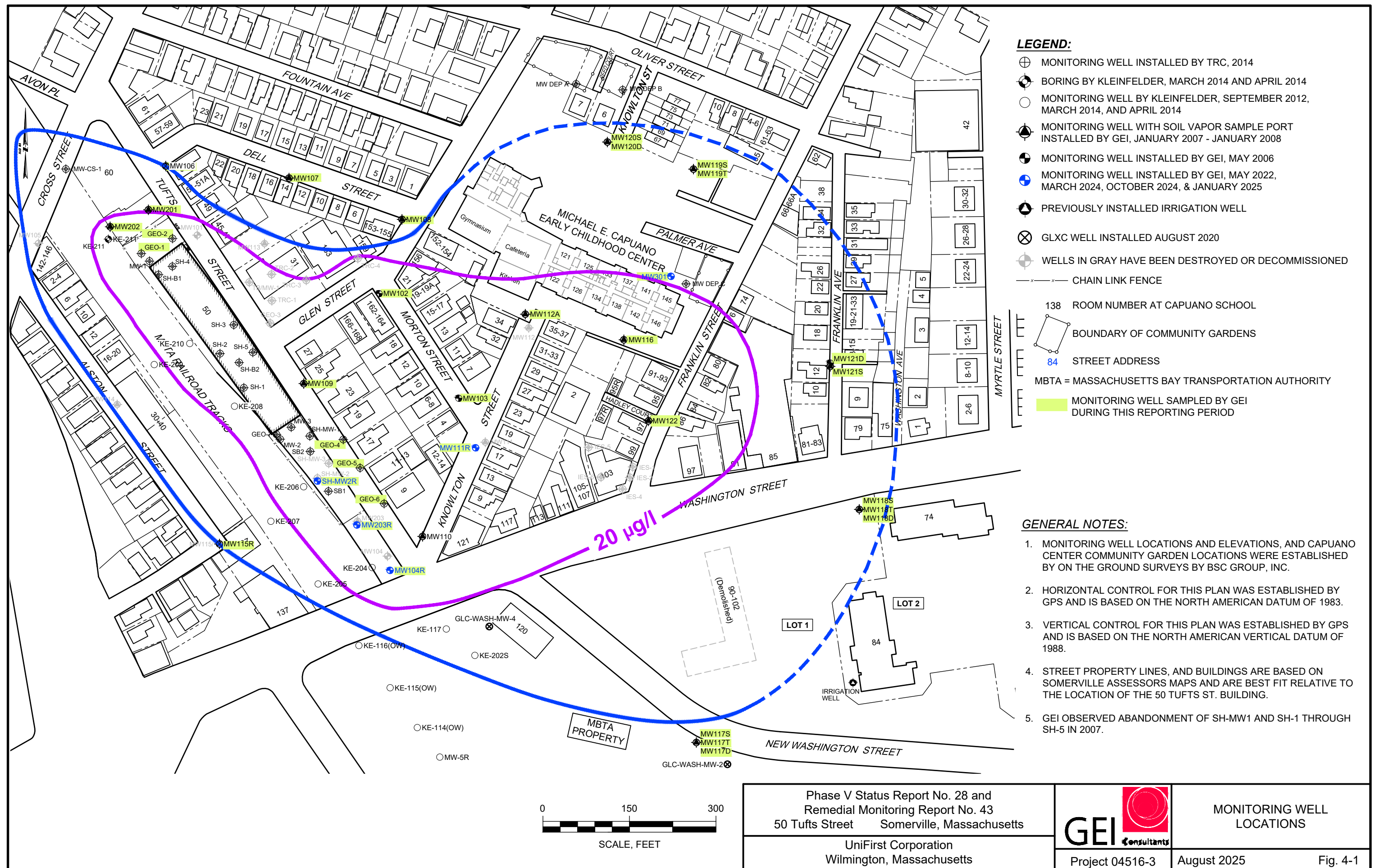
Project 04516-3

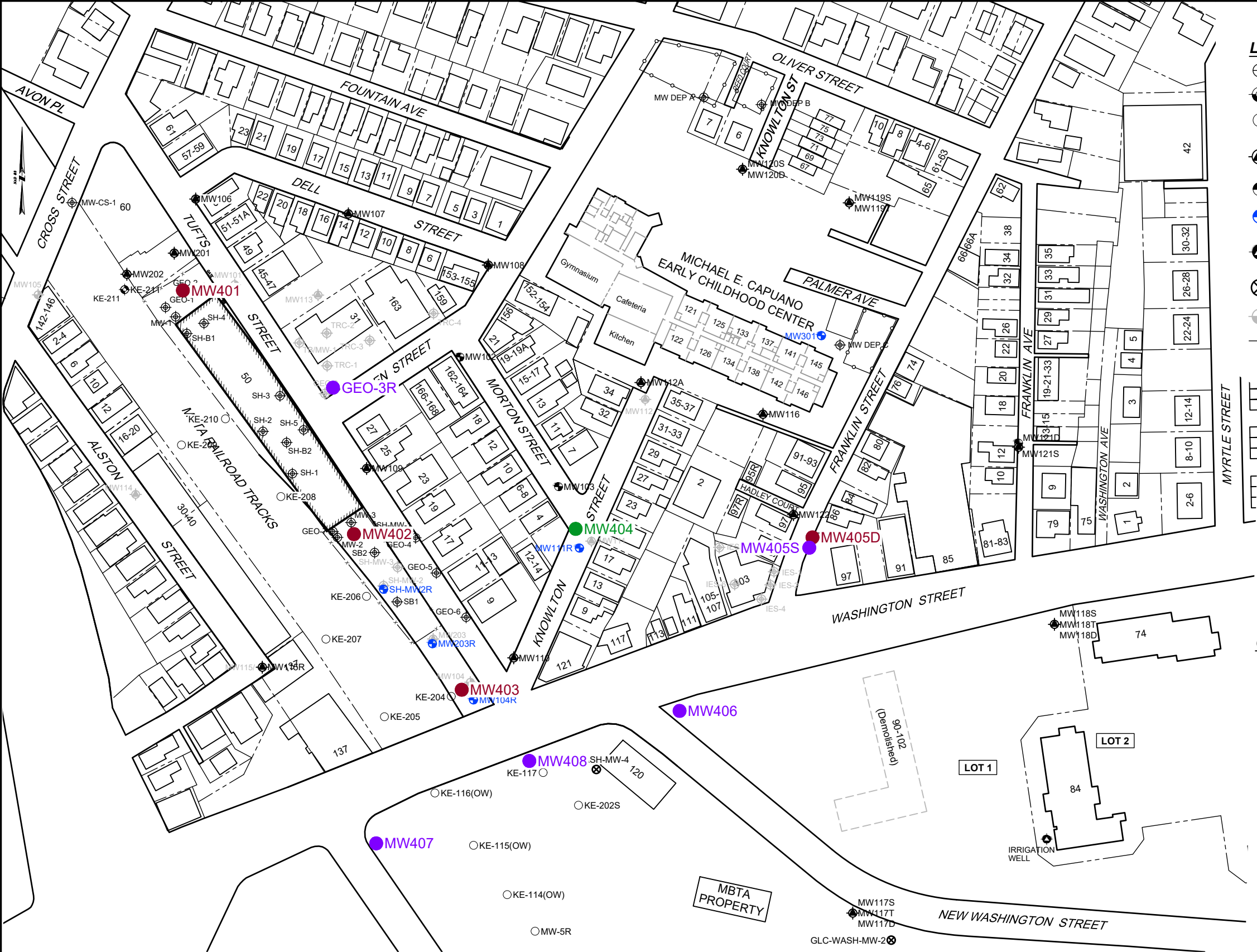
SITE LOCATION MAP

August 2025

Fig. 1-1







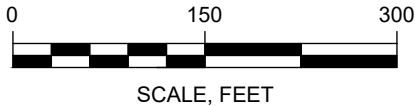
LEGEND:

- ⊕ MONITORING WELL INSTALLED BY TRC, 2014
- ⊙ BORING BY KLEINFELDER, MARCH 2014 AND APRIL 2014
- MONITORING WELL BY KLEINFELDER, SEPTEMBER 2012, MARCH 2014, AND APRIL 2014
- ⊙ MONITORING WELL WITH SOIL VAPOR SAMPLE PORT INSTALLED BY GEI, JANUARY 2007 - JANUARY 2008
- ⊙ MONITORING WELL INSTALLED BY GEI, MAY 2006
- ⊕ MONITORING WELL INSTALLED BY GEI, MAY 2022, MARCH 2024, OCTOBER 2024, & JANUARY 2025
- ⊙ PREVIOUSLY INSTALLED IRRIGATION WELL
- ⊗ GLXC WELL INSTALLED AUGUST 2020
- ⊙ WELLS IN GRAY HAVE BEEN DESTROYED OR DECOMMISSIONED
- x — CHAIN LINK FENCE
- 138 ROOM NUMBER AT CAPUANO SCHOOL
- BOUNDARY OF COMMUNITY GARDENS
- 84 STREET ADDRESS
- MBTA = MASSACHUSETTS BAY TRANSPORTATION AUTHORITY

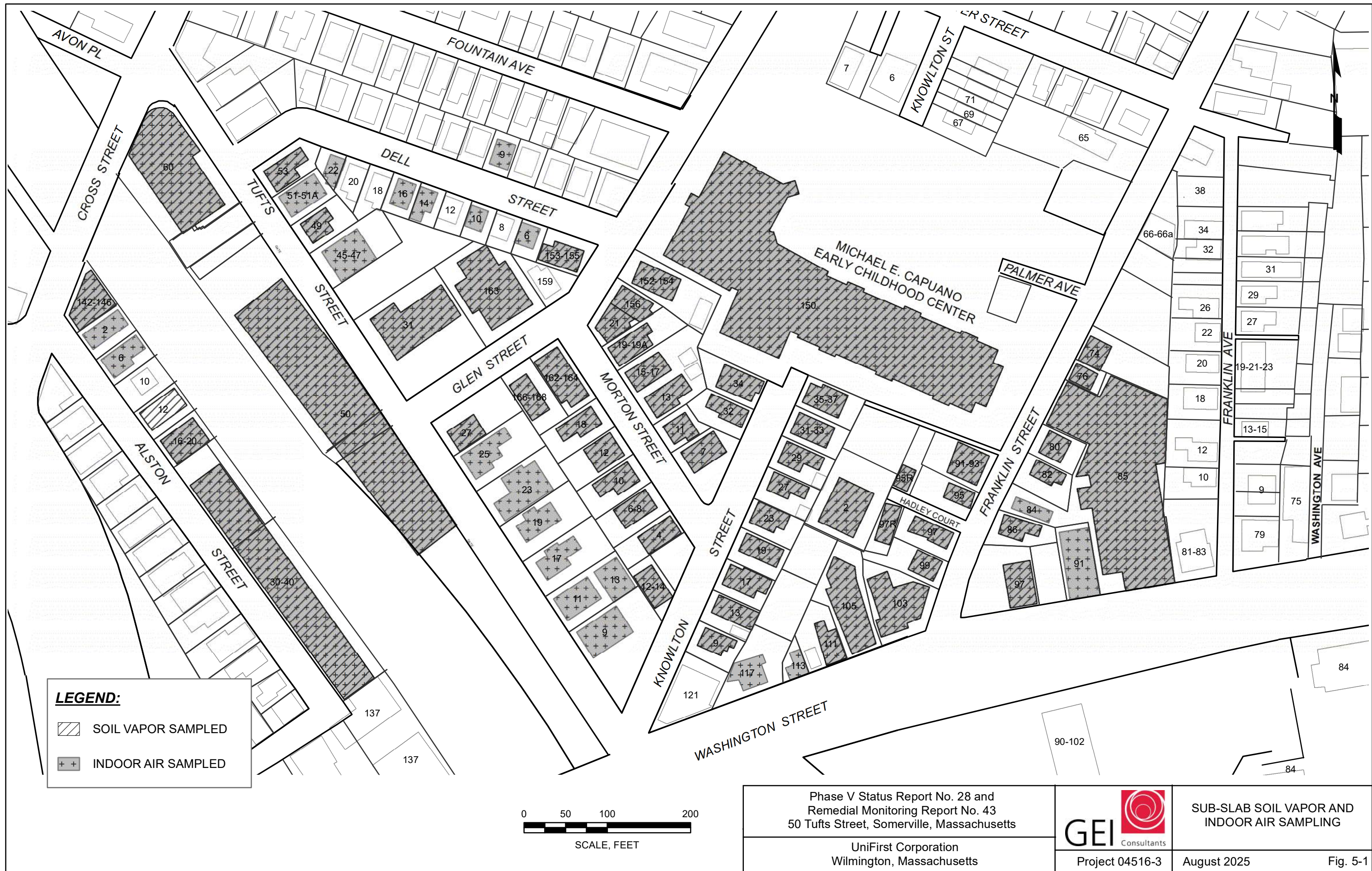
- GENERAL NOTES:**
1. MONITORING WELL LOCATIONS AND ELEVATIONS, AND CAPUANO CENTER COMMUNITY GARDEN LOCATIONS WERE ESTABLISHED BY ON THE GROUND SURVEYS BY BSC GROUP, INC.
 2. HORIZONTAL CONTROL FOR THIS PLAN WAS ESTABLISHED BY GPS AND IS BASED ON THE NORTH AMERICAN DATUM OF 1983.
 3. VERTICAL CONTROL FOR THIS PLAN WAS ESTABLISHED BY GPS AND IS BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988.
 4. STREET PROPERTY LINES, AND BUILDINGS ARE BASED ON SOMERVILLE ASSESSORS MAPS AND ARE BEST FIT RELATIVE TO THE LOCATION OF THE 50 TUFTS ST. BUILDING.
 5. GEI OBSERVED ABANDONMENT OF SH-MW1 AND SH-1 THROUGH SH-5 IN 2007.

LEGEND:

- MW ● PROPOSED OVERBURDEN MONITORING WELL
- MW ● PROPOSED SHALLOW BEDROCK MONITORING WELL
- MW ● PROPOSED DEEP BEDROCK MONITORING WELL



Phase V Status Report No. 28 and Remedial Monitoring Report No. 43 50 Tufts Street Somerville, Massachusetts			PROPOSED MONITORING WELL LOCATIONS
UniFirst Corporation Wilmington, Massachusetts			
Project 04516-3		August 2025	Fig. 4-2





LEGEND:

EPMM STATUS

- EPMM INSTALLED (ACTIVE)
- EPMM INSTALLED (OTHER EPMM)
- EPMM DEMONSTRATED TO BE NO LONGER REQUIRED (SEE NOTE 1)
- EPMM IN PROGRESS

Preferred Criteria For:

Option 1 (SSDS):

1. Competent concrete slab
2. Poured concrete foundation
3. Granular sub-grade (good sub-slab air flow)

Option 2 (Vapor Trench):

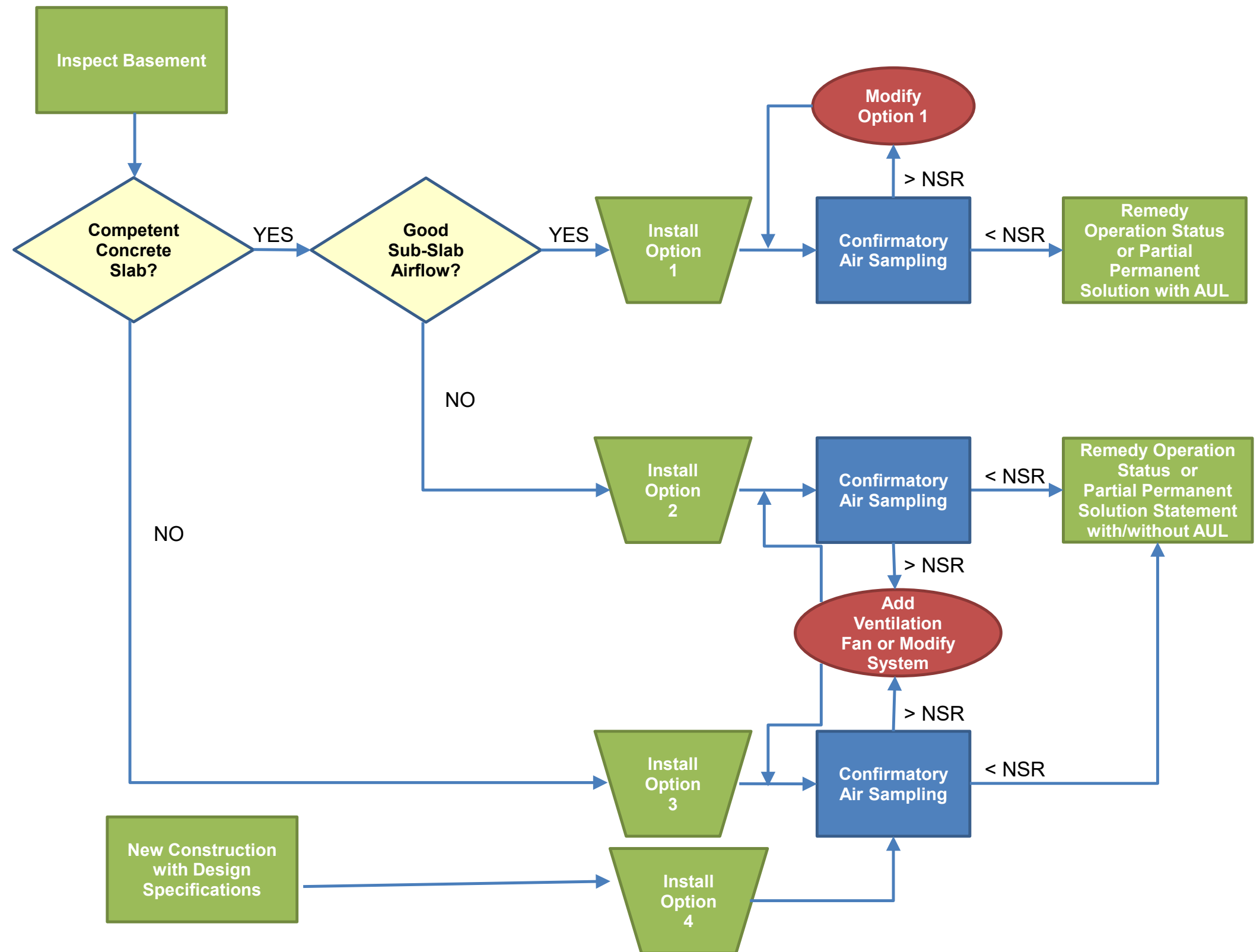
1. Competent concrete slab
2. Silt/clay sub-grade (poor sub-slab air flow)

Option 3 (New Slab Installation):

1. Incompetent concrete slab
2. Silt/clay sub-grade (poor sub-slab air flow)

Option 4 (New Construction):

1. New construction



NSR = No Significant Risk

Phase V Status Report No. 28 and
Remedial Monitoring Report No. 43
50 Tufts Street, Somerville, Massachusetts

UniFirst Corporation
Wilmington, Massachusetts

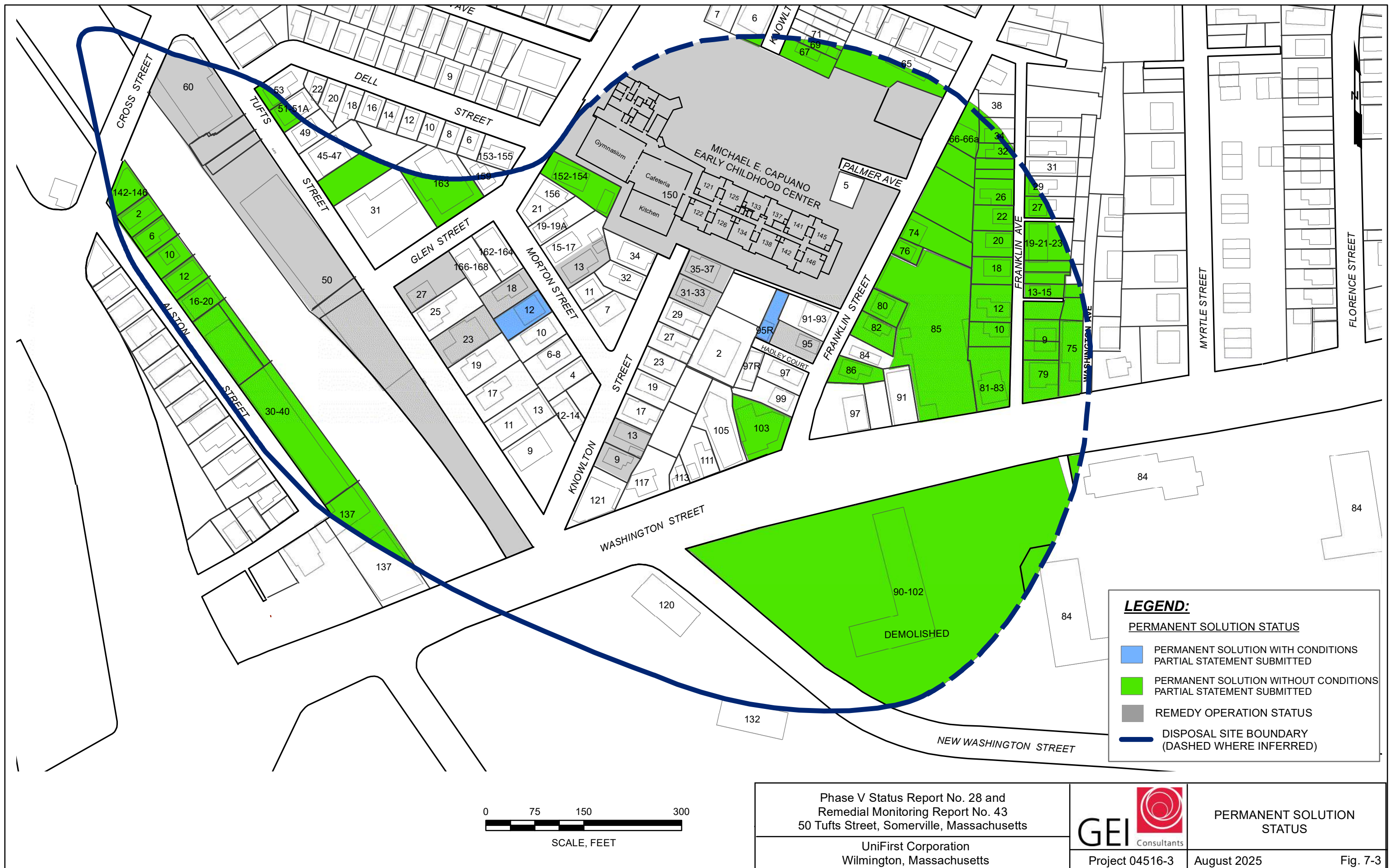


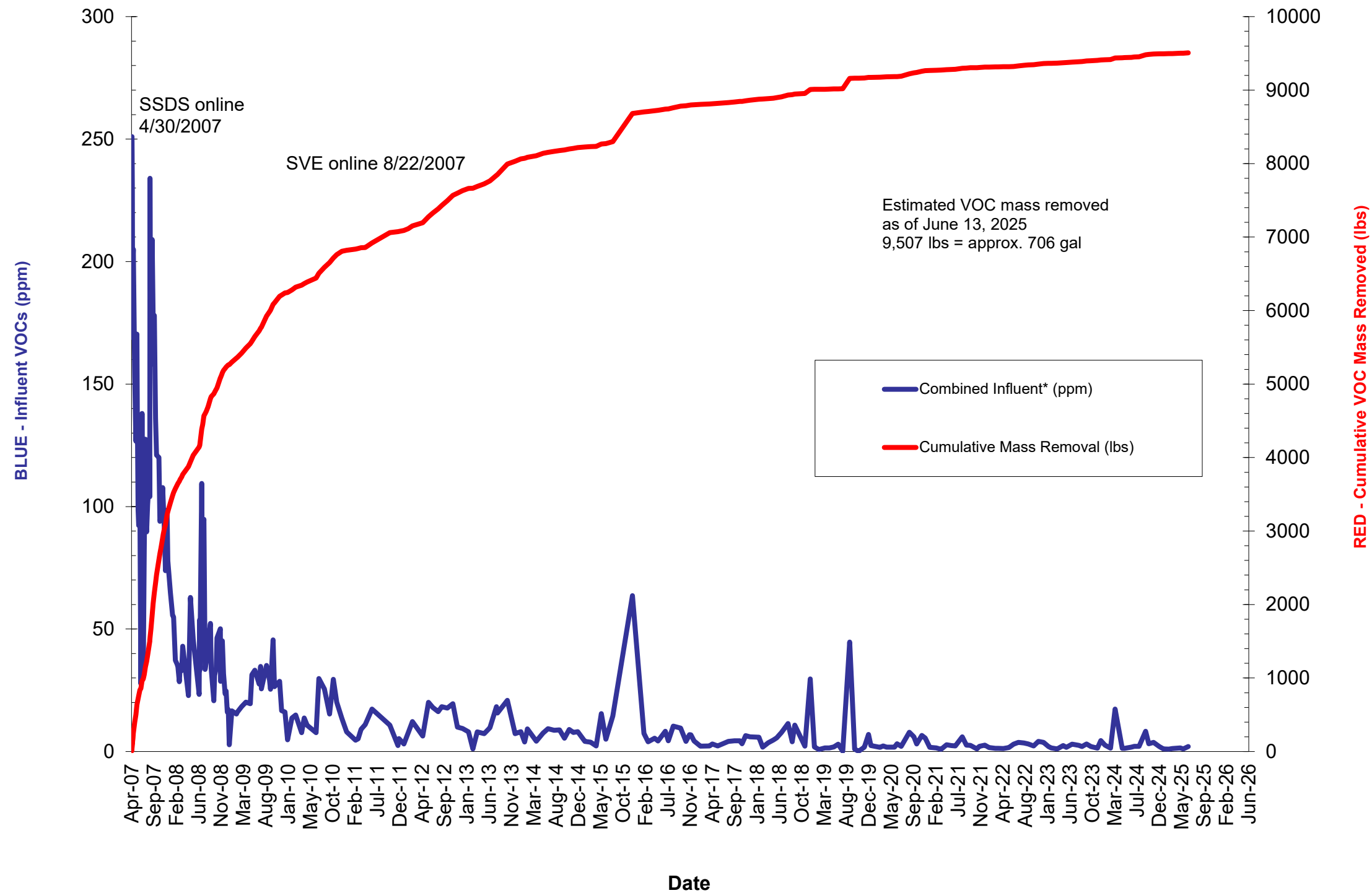
Project 04516-3

EPMM MITIGATION
FLOW CHART

August 2025

Fig. 7-2





General Notes:

lbs = pounds.

PCE = tetrachloroethylene (perchloroethylene).

ppm = parts per million.

SSDS = sub-slab depressurization system.

SVE = soil vapor extraction system.

VOC = volatile organic compound.

*Influent concentrations measured by a photoionization detector (PID).

Phase V Status Report No. 28 and
Remedial Monitoring Report No. 43
50 Tufts Street, Somerville, Massachusetts

UniFirst Corporation
Wilmington, Massachusetts

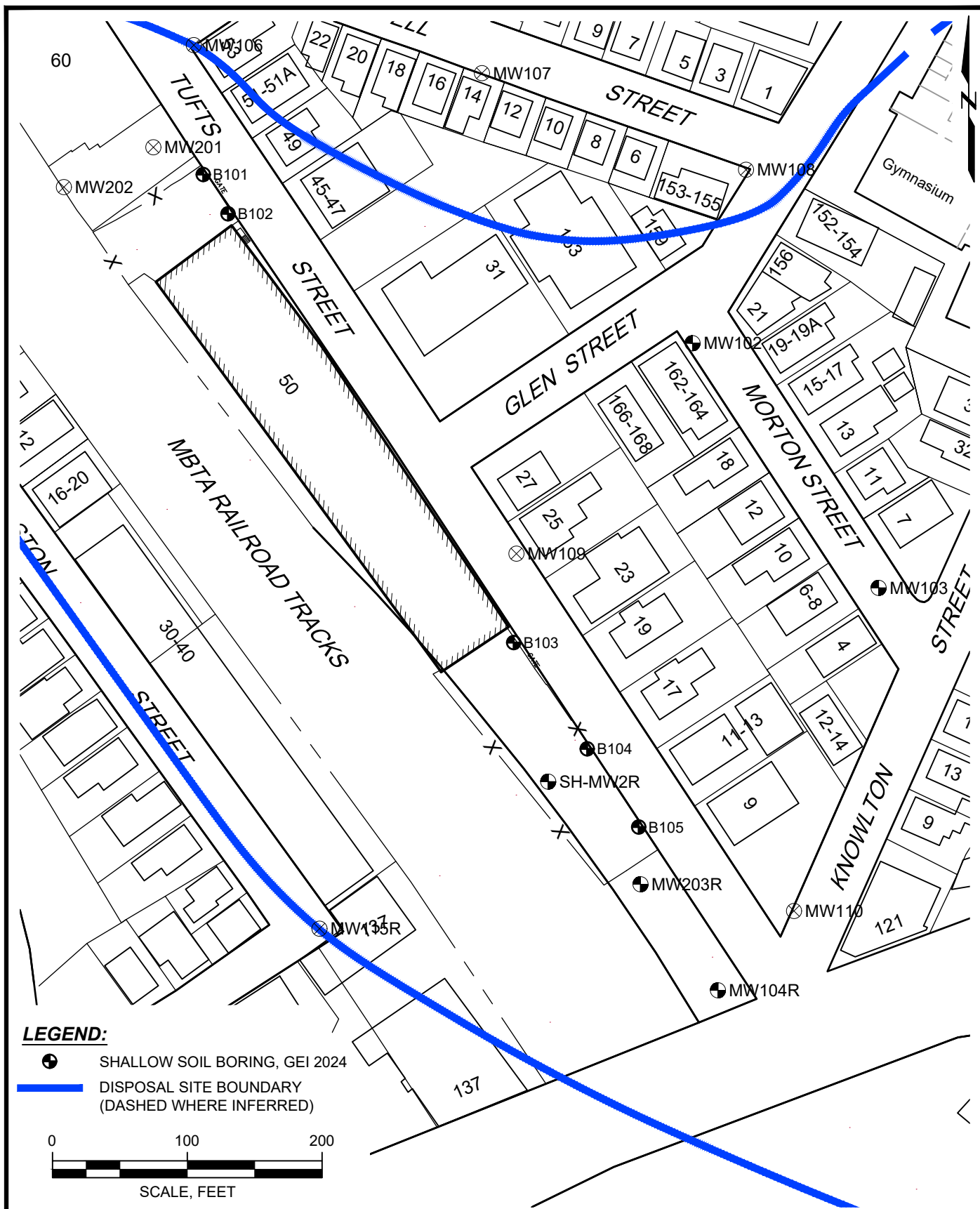


COMBINED INFLUENT VOC
CONCENTRATIONS AND
CUMULATIVE VOC REMOVAL

Project 04516-3

August 2025

Fig. 9-1



Phase V Status Report No. 28 and RMR No. 43
50 Tufts Street
Somerville, Massachusetts

Wooden Teeth LLC
Wilmington, Massachusetts



Project 045163

50 TUFTS STREET
SHALLOW SOIL BORING PLAN

August 2025

Fig. 11-1

Appendix A MassDEP Transmittal Forms (BWSC-108, BWSC-108As, and BWSC-108Bs)

Comprehensive Response Action Transmittal Forms:

- BWSC-108A 1 of 5 (50 Tufts SSDS)
- BWSC-108B 1 of 5 (50 Tufts SSDS)
- BWSC-108A 2 of 5 (50 Tufts SVE)
- BWSC-108B 2 of 5 (50 Tufts SVE)
- BWSC-108A 3 of 5 (Capuano Center)
- BWSC-108B 3 of 5 (Capuano Center)
- BWSC-108A 4 of 5 (Residences)
- BWSC-108A 5 of 5 (MNA)



**COMPREHENSIVE RESPONSE ACTION TRANSMITTAL
FORM & PHASE I COMPLETION STATEMENT**

Pursuant to 310 CMR 40.0484 (Subpart D) and 40.0800 (Subpart H)

Release Tracking Number

3 - 23246

A. SITE LOCATION:

1. Site Name: 50 TUFTS ST & PROP ACROSS THE ST
2. Street Address: 50 TUFTS ST
3. City/Town: SOMERVILLE 4. ZIP Code: 021454129

☒ 5. Check here if the disposal site that is the source of the release is Tier Classified. Check the current Tier Classification Category:

☐ a. Tier I ☐ b. Tier ID ☒ c. Tier II

B. THIS FORM IS BEING USED TO: (check all that apply)

- ☐ 1. Submit a **Phase I Completion Statement**, pursuant to 310 CMR 40.0484.
- ☐ 2. Submit a **Revised Phase I Completion Statement**, pursuant to 310 CMR 40.0484.
- ☐ 3. Submit a **Phase II Scope of Work**, pursuant to 310 CMR 40.0834.
- ☐ 4. Submit an **interim Phase II Report**. This report does not satisfy the response action deadline requirements in 310 CMR 40.0500.
- ☐ 5. Submit a **final Phase II Report and Completion Statement**, pursuant to 310 CMR 40.0836.
- ☐ 6. Submit a **Revised Phase II Report and Completion Statement**, pursuant to 310 CMR 40.0836.
- ☐ 7. Submit a **Phase III Remedial Action Plan and Completion Statement**, pursuant to 310 CMR 40.0862.
- ☐ 8. Submit a **Revised Phase III Remedial Action Plan and Completion Statement**, pursuant to 310 CMR 40.0862.
- ☐ 9. Submit a **Phase IV Remedy Implementation Plan**, pursuant to 310 CMR 40.0874.
- ☐ 10. Submit a **Modified Phase IV Remedy Implementation Plan**, pursuant to 310 CMR 40.0874.
- ☐ 11. Submit an **As-Built Construction Report**, pursuant to 310 CMR 40.0875.
- ☐ 12. Submit a **Phase IV Status Report**, pursuant to 310 CMR 40.0877.
- ☐ 13. Submit a **Phase IV Completion Statement**, pursuant to 310 CMR 40.0878 and 40.0879.

Specify the outcome of Phase IV activities: (check one)

- ☐ a. Phase V Operation, Maintenance or Monitoring of the Comprehensive Remedial Action is necessary to achieve a Permanent or Temporary Solution.
- ☐ b. The requirements of a Permanent Solution have been met. A completed Permanent Solution Statement and Report (BWSC104) will be submitted to DEP.
- ☐ c. The requirements of a Temporary Solution have been met. A completed Temporary Solution Statement and Report (BWSC104) will be submitted to DEP.



**COMPREHENSIVE RESPONSE ACTION TRANSMITTAL
FORM & PHASE I COMPLETION STATEMENT**

Release Tracking Number

3 - 23246

Pursuant to 310 CMR 40.0484 (Subpart D) and 40.0800 (Subpart H)

B. THIS FORM IS BEING USED TO (cont.): (check all that apply)

- ☐ 14. Submit a **Revised Phase IV Completion Statement**, pursuant to 310 CMR 40.0878 and 40.0879.
- ☒ 15. Submit a **Phase V Status Report**, pursuant to 310 CMR 40.0892.
- ☒ 16. Submit a **Remedial Monitoring Report**. (This report can only be submitted through eDEP.)
- a. Type of Report: (check one) ☐ i. Initial Report ☒ ii. Interim Report ☐ iii. Final Report
- b. Frequency of Submittal: (check all that apply)
- ☐ i. A Remedial Monitoring Report(s) submitted monthly to address an Imminent Hazard.
- ☐ ii. A Remedial Monitoring Report(s) submitted monthly to address a Condition of Substantial Release Migration.
- ☒ iii. A Remedial Monitoring Report(s) submitted every six months, concurrent with a Status Report.
- ☐ iv. A Remedial Monitoring Report(s) submitted, concurrent with a Status Report.
- c. Status of Site: (check one) ☐ i. Phase IV ☒ ii. Phase V ☐ iii. Remedy Operation Status ☐ iv. Temporary Solution
- d. Number of Remedial Systems and/or Monitoring Programs: 5
- A separate BWSC108A, CRA Remedial Monitoring Report, must be filled out for each Remedial System and/or Monitoring Program addressed by this transmittal form.
- ☐ 17. Submit a **Remedy Operation Status**, pursuant to 310 CMR 40.0893.
- ☐ 18. Submit a **Status Report to maintain a Remedy Operation Status**, pursuant to 310 CMR 40.0893(2).
- ☐ 19. Submit a **Transfer and/or a Modification of Persons Maintaining a Remedy Operation Status (ROS)**, pursuant to 310 CMR 40.0893(5) (check one, or both, if applicable).
- ☐ a. Submit a **Transfer of Persons Maintaining an ROS** (the transferee should be the person listed in Section D, "Person Undertaking Response Actions").
- ☐ b. Submit a **Modification of Persons Maintaining an ROS** (the primary representative should be the person listed in Section D, "Person Undertaking Response Actions").
- c. Number of Persons Maintaining an ROS not including the primary representative: _____
- ☐ 20. Submit a **Termination of a Remedy Operation Status**, pursuant to 310 CMR 40.0893(6). (check one)
- ☐ a. Submit a notice indicating ROS performance standards have not been met. A plan and timetable pursuant to 310 CMR 40.0893(6)(b) for resuming the ROS are attached.
- ☐ b. Submit a notice of Termination of ROS.
- ☐ 21. Submit a **Phase V Completion Statement**, pursuant to 310 CMR 40.0894.
- Specify the outcome of Phase V activities: (check one)
- ☐ a. The requirements of a Permanent Solution have been met. A completed Permanent Solution Statement and Report (BWSC104) will be submitted to DEP.
- ☐ b. The requirements for a Temporary Solution have been met. A completed Temporary Solution Statement and Report (BWSC104) will be submitted to DEP.
- ☐ 22. Submit a **Revised Phase V Completion Statement**, pursuant to 310 CMR 40.0894.
- ☐ 23. Submit a **Temporary Solution Status Report**, pursuant to 310 CMR 40.0898.
- ☐ 24. Submit a **Plan for the Application of Remedial Additives** near a sensitive receptor, pursuant to 310 CMR 40.0046(3).
- a. Status of Site: (check one)
- ☐ i. Phase IV ☐ ii. Phase V ☐ iii. Remedy Operation Status ☐ iv. Temporary Solution



**COMPREHENSIVE RESPONSE ACTION TRANSMITTAL
FORM & PHASE I COMPLETION STATEMENT**

Pursuant to 310 CMR 40.0484 (Subpart D) and 40.0800 (Subpart H)

Release Tracking Number

3

- 23246

C. LSP SIGNATURE AND STAMP:

I attest under the pains and penalties of perjury that I have personally examined and am familiar with this transmittal form, including any and all documents accompanying this submittal. In my professional opinion and judgment based upon application of (i) the standard of care in 309 CMR 4.02(1), (ii) the applicable provisions of 309 CMR 4.02(2) and (3), and 309 CMR 4.03(2), and (iii) the provisions of 309 CMR 4.03(3), to the best of my knowledge, information and belief,

> if Section B indicates that a **Phase I, Phase II, Phase III, Phase IV or Phase V Completion Statement** and/or a **Termination of a Remedy Operation Status** is being submitted, the response action(s) that is (are) the subject of this submittal (i) has (have) been developed and implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, and (iii) comply(ies) with the identified provisions of all orders, permits, and approvals identified in this submittal;

> if Section B indicates that a **Phase II Scope of Work** or a **Phase IV Remedy Implementation Plan** is being submitted, the response action(s) that is (are) the subject of this submittal (i) has (have) been developed in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, and (iii) comply(ies) with the identified provisions of all orders, permits, and approvals identified in this submittal;

> if Section B indicates that an **As-Built Construction Report**, a **Remedy Operation Status**, a **Phase IV, Phase V or Temporary Solution Status Report**, a **Status Report to Maintain a Remedy Operation Status**, a **Transfer or Modification of Persons Maintaining a Remedy Operation Status** and/or a **Remedial Monitoring Report** is being submitted, the response action(s) that is (are) the subject of this submittal (i) is (are) being implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, and (iii) comply(ies) with the identified provisions of all orders, permits, and approvals identified in this submittal.

I am aware that significant penalties may result, including, but not limited to, possible fines and imprisonment, if I submit information which I know to be false, inaccurate, or materially incomplete.

1. LSP#: 9719

2. First Name: ILEENS

3. Last Name: GLADSTONE

4. Telephone: 7817214012

5. Ext.:

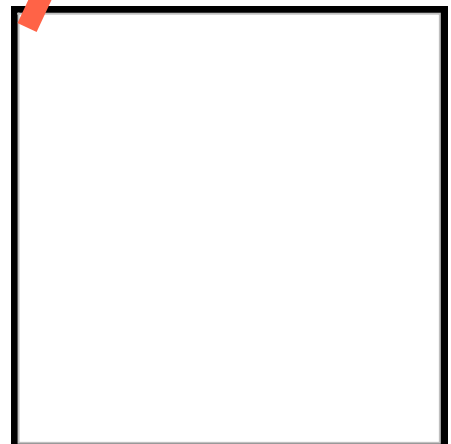
6. Email: igladstone@geiconsultants.com

7. Signature:

8. Date:

(mm/dd/yyyy)

9. LSP Stamp:





Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC 108

COMPREHENSIVE RESPONSE ACTION TRANSMITTAL
FORM & PHASE I COMPLETION STATEMENT

Release Tracking Number

3 - 23246

Pursuant to 310 CMR 40.0484 (Subpart D) and 40.0800 (Subpart H)

D. PERSON UNDERTAKING RESPONSE ACTIONS:

1. Check all that apply: ☐ a. change in contact name ☐ b. change of address ☐ c. change in the person undertaking response actions
2. Name of Organization: UNIFIRST CORPORATION
3. Contact First Name: CATHERINE 4. Last Name: MALAGRIDA
5. Street: 68 JONSPIN RD 6. Title: ENV COMPLIANCE MANAGER
7. City/Town: WILMINGTON 8. State: MA 9. ZIP Code: 018871090
10. Telephone: 9786588888 11. Ext: 12. Email: catherine_malagrida@unifirst.com

E. RELATIONSHIP TO SITE OF PERSON UNDERTAKING RESPONSE ACTIONS: ☐ Check here to change relationship

- ☒ 1. RP or PRP ☐ a. Owner ☐ b. Operator ☐ c. Generator ☐ d. Transporter
☒ e. Other RP or PRP Specify: OTHER PRPS
- ☐ 2. Fiduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c. 21E, s. 2)
- ☐ 3. Agency or Public Utility on a Right of Way (as defined by M.G.L. c. 21E, s. 5(j))
- ☐ 4. Any Other Person Undertaking Response Actions Specify Relationship:

F. REQUIRED ATTACHMENT AND SUBMITTALS:

- ☐ 1. Check here if the Response Action(s) on which this opinion is based, if any, are (were) subject to any order(s), permit(s) and/or approval(s) issued by DEP or EPA. If the box is checked, you MUST attach a statement identifying the applicable provisions thereof.
- ☒ 2. Check here to certify that the Chief Municipal Officer and the Local Board of Health have been notified of the submittal of any Phase Reports to DEP.
- ☒ 3. Check here to certify that the Chief Municipal Officer and the Local Board of Health have been notified of the availability of a Phase III Remedial Action Plan.
- ☒ 4. Check here to certify that the Chief Municipal Officer and the Local Board of Health have been notified of the availability of a Phase IV Remedy Implementation Plan.
- ☒ 5. Check here to certify that the Chief Municipal Officer and the Local Board of Health have been notified of any field work involving the implementation of a Phase IV Remedial Action.
- ☐ 6. If submitting a Transfer of a Remedy Operation Status (as per 310 CMR 40.0893(5)), check here to certify that a statement detailing the compliance history for the person making this submittal (transferee) is attached.
- ☐ 7. If submitting a Modification of a Remedy Operation Status (as per 310 CMR 40.0893(5)), check here to certify that a statement detailing the compliance history for each new person making this submittal is attached.
- ☐ 8. Check here if any non-updatable information provided on this form is incorrect, e.g. Release Address/Location Aid. Send corrections to: BWSC.eDEP@Mass.Gov.
- ☒ 9. Check here to certify that the LSP Opinion containing the material facts, data including, but not limited to: pressure measurements, maps, graphs, or diagrams, and other information is attached.



COMPREHENSIVE RESPONSE ACTION TRANSMITTAL
FORM & PHASE I COMPLETION STATEMENT

Pursuant to 310 CMR 40.0484 (Subpart D) and 40.0800 (Subpart H)

Release Tracking Number

3 - 23246

G. CERTIFICATION OF PERSON UNDERTAKING RESPONSE ACTIONS:

1. I, _____, attest under the pains and penalties of perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

>if Section B indicates that this is a **Modification of a Remedy Operation Status (ROS)**, I attest under the pains and penalties of perjury that I am fully authorized to act on behalf of all persons performing response actions under the ROS as stated in 310 CMR 40.0893(5)(d) to receive oral and written correspondence from MassDEP with respect to performance of response actions under the ROS, and to receive a statement of fee amount as per 4.03(3).

I understand that any material received by the Primary Representative from MassDEP shall be deemed received by all the persons performing response actions under the ROS, and I am aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate or incomplete information.

2. By: _____ 3. Title: ENV COMPLIANCE MANAGER
Signature

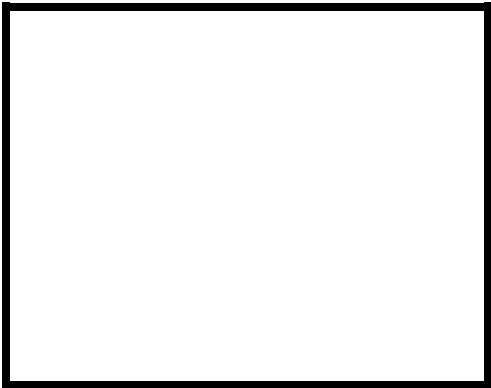
4. For: UNIFIRST CORPORATION 5. Date: _____
(Name of person or entity recorded in Section D) (mm/dd/yyyy)

☐ 6. Check here if the address of the person providing certification is different from address recorded in Section D.

7. Street: _____
8. City/Town: _____ 9. State: _____ 10. ZIP Code: _____
11. Telephone: _____ 12. Ext: _____ 13. Email: _____

YOU ARE SUBJECT TO AN ANNUAL COMPLIANCE ASSURANCE FEE OF UP TO \$10,000 PER BILLABLE YEAR FOR THIS DISPOSAL SITE. YOU MUST LEGIBLY COMPLETE ALL RELEVANT SECTIONS OF THIS FORM OR DEP MAY RETURN THE DOCUMENT AS INCOMPLETE. IF YOU SUBMIT AN INCOMPLETE FORM, YOU MAY BE PENALIZED FOR MISSING A REQUIRED DEADLINE.

Date Stamp (DEP USE ONLY:)





Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup
CRA REMEDIAL MONITORING REPORT

BWSC108 -A

Pursuant to 310 CMR 40.0800 (SUBPART H)

Release Tracking Number

Remedial System or Monitoring Program: 1 of 5

3 - 23246

A. DESCRIPTION OF ACTIVE OPERATION AND MAINTENANCE ACTIVITY:

1. Type of Active Operation and Maintenance Activity: (check all that apply)

☐ a. Active Remedial System: (check all that apply)

☐ i. NAPL Recovery

☐ ii. Soil Vapor Extraction/Bioventing

☐ iii. Vapor-phase Carbon Adsorption

☐ iv. Groundwater Recovery

☐ v. Dual/Multi-phase Extraction

☐ vi. Aqueous-phase Carbon Adsorption

☐ vii. Air Stripping

☐ viii. Sparging/Biosparging

☐ ix. Cat/Thermal Oxidation

☐ x. Other Describe: _____

☒ b. Active Exposure Pathway Elimination Measure

Active Exposure Pathway Mitigation System to address (check one): ☒ i. Indoor Air ☐ ii. Drinking Water

☐ c. Application of Remedial Additives: (check all that apply)

☐ i. To the Subsurface

☐ ii. To Groundwater (Injection)

☐ iii. To the Surface (Including stockpiled soil)

☐ d. Active Remedial Monitoring Program Without the Application of Remedial Additives: (check all that apply; Sections C, D and E are not required; attach supporting information, data, maps and/or sketches needed by checking Section G5)

☐ i. Reactive Wall

☐ ii. Natural Attenuation

☐ iii. Other

Describe: _____

2. Mode of Operation: (check one)

☒ a. Continuous

☐ b. Intermittent

☐ c. Pulsed

☐ d. One-time Event Only

☐ e. Other: _____

3. System Effluent/Discharge: (check all that apply)

☐ a. Sanitary Sewer (O1)

☐ b. Groundwater Re-infiltration Re-injection: (check one)

☐ i. Downgradient

☐ ii. Upgradient

☒ c. Vapor-phase Discharge to Ambient Air: (check one)

☒ i. Off-gas Controls

☐ ii. No Off-gas Controls

☐ d. Drinking Water Supply

☐ e. Surface Water (including Storm Drains)

☐ f. Other Describe: _____

B. MONITORING FREQUENCY:

1. Reporting period that is the subject of this submittal:

From: 12/6/24

To: 6/15/2025

(mm/dd/yyyy)

(mm/dd/yyyy)

2. Number of monitoring events during the reporting period: (check one)

☐ a. System Startup: (if applicable)

☐ i. Days 1, 3, 6, and then weekly thereafter, for the first month.

☐ ii. Other Describe: _____

☒ b. Post-system Startup (after first month) or Monitoring Program:

☐ i. Monthly

☐ ii. Quarterly

☐ iii. Annually

☒ iv. Other Describe: OPERATIONAL PARAMETERS QUARTERLY, OFF-GAS MONTHLY

☐ 3. Check here to certify that the number of required monitoring events were conducted during the reporting period.

C. EFFLUENT/DISCHARGE REGULATION: (check one to indicate how the effluent/discharge limits were established)

☐ 1. NPDES: (check one)

☐ a. Remediation General Permit

☐ b. Individual Permit

☐ c. Emergency Exclusion

Effective Date of Permit: _____

(mm/dd/yyyy)

☒ 2. MCP Performance Standard

MCP Citations(s):

WSC-94-150

☐ 3. DEP Approval Letter

Date of Letter: _____

(mm/dd/yyyy)

☐ 4. Other Describe: _____



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

CRA REMEDIAL MONITORING REPORT

Pursuant to 310 CMR 40.0800 (SUBPART H)

Remedial System or Monitoring Program: of

BWSC108 -A

Release Tracking Number

-

D. WASTEWATER TREATMENT PLANT OPERATOR: (check one)

- ☐ 1. Required due to Remedial Wastewater Treatment Plant in place for more than 30 days.
a. Name: _____ b. Grade: _____
c. License No: _____ d. License Exp. Date: _____
(mm/dd/yyyy)
- ☐ 2. Not Required
- ☒ 3. Not Applicable

E. STATUS OF ACTIVE REMEDIAL SYSTEM, ACTIVE EXPOSURE PATHWAY MITIGATION MEASURE(AEPMM) OR ACTIVE REMEDIAL MONITORING PROGRAM DURING REPORTING PERIOD: (check all that apply)

- ☒ 1. The Active Remedial System or AEPMM was functional one or more days during the Reporting Period.
- a. Days System was Fully Functional: b. GW Recovered (gals): _____
c. NAPL Recovered (gals): _____ d. GW Discharged (gals): _____
e. Avg. Soil Gas Recovery Rate (scfm): f. Avg. Sparging Rate (scfm): _____
- ☐ 2. Remedial Additives: (check all that apply)

- ☐ a. No Remedial Additives applied during the Reporting Period.
- ☐ b. Enhanced Bioremediation Additives applied: (total quantity applied at the site for the current reporting period)
- ☐ i. Nitrogen/Phosphorus: ☐ ii. Peroxides:

Name of Additive	Date	Quantity	Units

Name of Additive	Date	Quantity	Units

☐ iii. Microorganisms:

☐ iv. Other:

Name of Additive	Date	Quantity	Units

Name of Additive	Date	Quantity	Units

- ☐ c. Chemical oxidation/reduction additives applied: (total quantity applied at the site for the current reporting period)

☐ i. Permanganates:

☐ ii. Peroxides:

Name of Additive	Date	Quantity	Units

Name of Additive	Date	Quantity	Units

☐ iii. Persulfates:

☐ iv. Other:

Name of Additive	Date	Quantity	Units

Name of Additive	Date	Quantity	Units



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

CRA REMEDIAL MONITORING REPORT

Pursuant to 310 CMR 40.0800 (SUBPART H)

Remedial System or Monitoring Program: 1 of 5

BWSC108 -A

Release Tracking Number

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E. STATUS OF ACTIVE REMEDIAL SYSTEM, AEPMM OR ACTIVE REMEDIAL MONITORING PROGRAM DURING REPORTING PERIOD: (cont.)

☐ d. Other additives applied: (total quantity applied at the site for the current reporting period)

Name of Additive	Date	Quantity	Units

Name of Additive	Date	Quantity	Units

☐ e. Check here if any additional Remedial Additives were applied. Attach list of additional additives and include Name of Additive, Date Applied, Quantity Applied and Units (in gals. or lbs.)

F. SHUTDOWNS OF ACTIVE REMEDIAL SYSTEM, AEPMM OR ACTIVE REMEDIAL MONITORING PROGRAM:

(check all that apply)

☐ 1. The Active Remedial System or AEPMM had unscheduled shutdowns on one or more occasions during the Reporting Period.

a. Number of Unscheduled Shutdowns: _____ b. Total Number of Days of Unscheduled Shutdowns: _____

c. Reason(s) for Unscheduled Shutdowns: _____

☐ 2. The Active Remedial System or AEPMM had scheduled shutdowns on one or more occasions during the Reporting Period.

a. Number of Scheduled Shutdowns: _____ b. Total Number of Days of Scheduled Shutdowns: _____

c. Reason(s) for Scheduled Shutdowns: _____

☐ 3. The Active Remedial System, AEPMM or Active Remedial Monitoring Program was permanently shutdown/discontinued during the Reporting Period.

a. Date of Final System or Monitoring Program Shutdown: _____
(mm/dd/yyyy)

☐ b. No Further Effluent Discharge

☐ c. No Further Application of Remedial Additives planned; sufficient monitoring completed to demonstrate compliance with 310 CMR 40.0046.

☐ d. No Further Submittals Planned.

☐ e. Other: Describe: _____

G. SUMMARY STATEMENTS: (check all that apply for the current reporting period)

☒ 1. All Active Remedial System checks and effluent analyses required by the approved plan and/or permit were performed when applicable.

☒ 2. There were no significant problems or prolonged (>25% of reporting period) unscheduled shutdowns of the Active Remedial System.

☒ 3. The Active Remedial System, AEPMM or Active Remedial Monitoring Program operated in conformance with the MCP, and all applicable approval conditions and/or permits.

4. Indicate any Operational Problems or Notes:

☐ 5. Check here if additional/supporting Information, data, maps, and/or sketches are attached to the form.



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup
CRA REMEDIAL MONITORING REPORT
MEASUREMENTS

BWSC108 -B

Pursuant to 310 CMR 40.0800 (SUBPART H)

Remedial System or Monitoring Program:

1

of: 5

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For each Point of Measurement, related to concentration indicate the highest concentration detected during the reporting period, of each oil, hazardous material and/or remedial additive.

For each Point of Measurement for pressure differentials, indicate the lowest pressure differential detected during the reporting period.

Point of Measurement	Date (mm/dd/yyyy)	Contaminant, Measurement and/or Indicator Parameter	Influent Concentration (where applicable)	Midpoint Concentration (where applicable)	(check one)	Check here, if ND/BDL	Permissible Concentration or Pressure Differential	Units	Within Permissible Limits? (Y/N)
					☒ Discharge ☐ Ground Water Concentration Pressure Differential				
SSDS	01/08/2025	TOTAL VOCS	1.1		0.0	☒	0.055	PPMV	YES
SSDS	02/11/2025	TOTAL VOCS	1.0		0.0	☒	0.05	PPMV	YES
SSDS	03/06/2025	TOTAL VOCS	1.2		0.0	☒	0.06	PPMV	YES
SSDS	04/24/2025	TOTAL VOCS	1.5		0.0	☒	0.075	PPMV	YES
SSDS	05/13/2025	TOTAL VOCS	1.1		0.0	☒	0.055	PPMV	YES
SSDS	05/13/2025	TOTAL VOCS	2.0		0.0	☒	0.1	PPMV	YES

☐ Check here, if any additional BWSC108 B, Measurements Form(s), are needed.



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup
CRA REMEDIAL MONITORING REPORT

BWSC108 -A

Pursuant to 310 CMR 40.0800 (SUBPART H)

Release Tracking Number

Remedial System or Monitoring Program:

2

of:

5

3

-

23246

A. DESCRIPTION OF ACTIVE OPERATION AND MAINTENANCE ACTIVITY:

1. Type of Active Operation and Maintenance Activity: (check all that apply)

☒ a. Active Remedial System: (check all that apply)

☐ i. NAPL Recovery

☒ ii. Soil Vapor Extraction/Bioventing

☐ iii. Vapor-phase Carbon Adsorption

☐ iv. Groundwater Recovery

☐ v. Dual/Multi-phase Extraction

☐ vi. Aqueous-phase Carbon Adsorption

☐ vii. Air Stripping

☐ viii. Sparging/Biosparging

☐ ix. Cat/Thermal Oxidation

☐ x. Other Describe: _____

☐ b. Active Exposure Pathway Elimination Measure

Active Exposure Pathway Mitigation System to address (check one): ☐ i. Indoor Air ☐ ii. Drinking Water

☐ c. Application of Remedial Additives: (check all that apply)

☐ i. To the Subsurface

☐ ii. To Groundwater (Injection)

☐ iii. To the Surface (Including stockpiled soil)

☐ d. Active Remedial Monitoring Program Without the Application of Remedial Additives: (check all that apply; Sections C, D and E are not required; attach supporting information, data, maps and/or sketches needed by checking Section G5)

☐ i. Reactive Wall

☐ ii. Natural Attenuation

☐ iii. Other

Describe: _____

2. Mode of Operation: (check one)

☒ a. Continuous

☐ b. Intermittent

☐ c. Pulsed

☐ d. One-time Event Only

☐ e. Other: _____

3. System Effluent/Discharge: (check all that apply)

☐ a. Sanitary Sewer (O1)

☐ b. Groundwater Re-infiltration/Re-injection: (check one)

☐ i. Downgradient

☐ ii. Upgradient

☒ c. Vapor-phase Discharge to Ambient Air: (check one)

☒ i. Off-gas Controls

☐ ii. No Off-gas Controls

☐ d. Drinking Water Supply

☐ e. Surface Water (including Storm Drains)

☐ f. Other Describe: _____

B. MONITORING FREQUENCY:

1. Reporting period that is the subject of this submittal:

From: 12/6/24

To: 6/15/2025

(mm/dd/yyyy)

(mm/dd/yyyy)

2. Number of monitoring events during the reporting period: (check one)

☐ a. System Startup: (if applicable)

☐ i. Days 1, 3, 6, and then weekly thereafter, for the first month.

☐ ii. Other Describe: _____

☒ b. Post-system Startup (after first month) or Monitoring Program:

☐ i. Monthly

☐ ii. Quarterly

☐ iii. Annually

☒ iv. Other Describe: OPERATIONAL PARAMETERS QUARTERLY, OFF-GAS MONTHLY

☐ 3. Check here to certify that the number of required monitoring events were conducted during the reporting period.

C. EFFLUENT/DISCHARGE REGULATION: (check one to indicate how the effluent/discharge limits were established)

☐ 1. NPDES: (check one)

☐ a. Remediation General Permit

☐ b. Individual Permit

☐ c. Emergency Exclusion

Effective Date of Permit: _____

(mm/dd/yyyy)

☒ 2. MCP Performance Standard

MCP Citations(s):

WSC-94-150

☐ 3. DEP Approval Letter

Date of Letter: _____

(mm/dd/yyyy)

☐ 4. Other Describe: _____



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

CRA REMEDIAL MONITORING REPORT

Pursuant to 310 CMR 40.0800 (SUBPART H)

Remedial System or Monitoring Program: 2 of 5

BWSC108 -A

Release Tracking Number

3 - 23246

D. WASTEWATER TREATMENT PLANT OPERATOR: (check one)

- ☐ 1. Required due to Remedial Wastewater Treatment Plant in place for more than 30 days.
a. Name: _____ b. Grade: _____
c. License No: _____ d. License Exp. Date: _____
(mm/dd/yyyy)
- ☐ 2. Not Required
- ☒ 3. Not Applicable

E. STATUS OF ACTIVE REMEDIAL SYSTEM, ACTIVE EXPOSURE PATHWAY MITIGATION MEASURE(AEPMM) OR ACTIVE REMEDIAL MONITORING PROGRAM DURING REPORTING PERIOD: (check all that apply)

- ☒ 1. The Active Remedial System or AEPMM was functional one or more days during the Reporting Period.
- a. Days System was Fully Functional: 182 b. GW Recovered (gals): _____
c. NAPL Recovered (gals): _____ d. GW Discharged (gals): _____
e. Avg. Soil Gas Recovery Rate (scfm): 352 f. Avg. Sparging Rate (scfm): _____
- ☐ 2. Remedial Additives: (check all that apply)

- ☐ a. No Remedial Additives applied during the Reporting Period.
- ☐ b. Enhanced Bioremediation Additives applied: (total quantity applied at the site for the current reporting period)
- ☐ i. Nitrogen/Phosphorus: ☐ ii. Peroxides:

Name of Additive	Date	Quantity	Units

Name of Additive	Date	Quantity	Units

☐ iii. Microorganisms:

☐ iv. Other:

Name of Additive	Date	Quantity	Units

Name of Additive	Date	Quantity	Units

- ☐ c. Chemical oxidation/reduction additives applied: (total quantity applied at the site for the current reporting period)
- ☐ i. Permanganates: ☐ ii. Peroxides:

Name of Additive	Date	Quantity	Units

Name of Additive	Date	Quantity	Units

☐ iii. Persulfates:

☐ iv. Other:

Name of Additive	Date	Quantity	Units

Name of Additive	Date	Quantity	Units



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

CRA REMEDIAL MONITORING REPORT

Pursuant to 310 CMR 40.0800 (SUBPART H)

Remedial System or Monitoring Program: of

BWSC108 -A

Release Tracking Number

-

E. STATUS OF ACTIVE REMEDIAL SYSTEM, AEPMM OR ACTIVE REMEDIAL MONITORING PROGRAM DURING REPORTING PERIOD: (cont.)

☐ d. Other additives applied: (total quantity applied at the site for the current reporting period)

Name of Additive	Date	Quantity	Units

Name of Additive	Date	Quantity	Units

☐ e. Check here if any additional Remedial Additives were applied. Attach list of additional additives and include Name of Additive, Date Applied, Quantity Applied and Units (in gals. or lbs.)

F. SHUTDOWNS OF ACTIVE REMEDIAL SYSTEM, AEPMM OR ACTIVE REMEDIAL MONITORING PROGRAM:

(check all that apply)

☐ 1. The Active Remedial System or AEPMM had unscheduled shutdowns on one or more occasions during the Reporting Period.

a. Number of Unscheduled Shutdowns: _____ b. Total Number of Days of Unscheduled Shutdowns: _____

c. Reason(s) for Unscheduled Shutdowns: _____

☐ 2. The Active Remedial System or AEPMM had scheduled shutdowns on one or more occasions during the Reporting Period.

a. Number of Scheduled Shutdowns: _____ b. Total Number of Days of Scheduled Shutdowns: _____

c. Reason(s) for Scheduled Shutdowns: _____

☐ 3. The Active Remedial System, AEPMM or Active Remedial Monitoring Program was permanently shutdown/discontinued during the Reporting Period.

a. Date of Final System or Monitoring Program Shutdown: _____
(mm/dd/yyyy)

☐ b. No Further Effluent Discharge

☐ c. No Further Application of Remedial Additives planned; sufficient monitoring completed to demonstrate compliance with 310 CMR 40.0046.

☐ d. No Further Submittals Planned.

☐ e. Other: Describe: _____

G. SUMMARY STATEMENTS: (check all that apply for the current reporting period)

☒ 1. All Active Remedial System checks and effluent analyses required by the approved plan and/or permit were performed when applicable.

☒ 2. There were no significant problems or prolonged (>25% of reporting period) unscheduled shutdowns of the Active Remedial System.

☒ 3. The Active Remedial System, AEPMM or Active Remedial Monitoring Program operated in conformance with the MCP, and all applicable approval conditions and/or permits.

4. Indicate any Operational Problems or Notes:

☐ 5. Check here if additional/supporting Information, data, maps, and/or sketches are attached to the form.



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup
CRA REMEDIAL MONITORING REPORT
MEASUREMENTS

BWSC108 -B

Pursuant to 310 CMR 40.0800 (SUBPART H)

Remedial System or Monitoring Program: of:

Release Tracking Number

For each Point of Measurement, related to concentration indicate the highest concentration detected during the reporting period, of each oil, hazardous material and/or remedial additive.

For each Point of Measurement for pressure differentials, indicate the lowest pressure differential detected during the reporting period.

Point of Measurement	Date (mm/dd/yyyy)	Contaminant, Measurement and/or Indicator Parameter	Influent Concentration (where applicable)	Midpoint Concentration (where applicable)	(check one)	Check here, if ND/BDL	Permissible Concentration or Pressure Differential	Units	Within Permissible Limits? (Y/N)
					☒ Discharge ☐ Ground Water Concentration Pressure Differential				
SVE	01/08/2025	TOTAL VOCS	1.1		0.0	☒	0.055	PPMV	YES
SVE	02/11/2025	TOTAL VOCS	1.0		0.0	☒	0.05	PPMV	YES
SVE	03/06/2025	TOTAL VOCS	1.2		0.0	☒	0.06	PPMV	YES
SVE	04/24/2025	TOTAL VOCS	1.5		0.0	☒	0.075	PPMV	YES
SVE	05/13/2025	TOTAL VOCS	1.1		0.0	☒	0.055	PPMV	YES
SVE	05/13/2025	TOTAL VOCS	2.0		0.0	☒	0.1	PPMV	YES

☐ Check here, if any additional BWSC108 B, Measurements Form(s), are needed.



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup
CRA REMEDIAL MONITORING REPORT

BWSC108 -A

Pursuant to 310 CMR 40.0800 (SUBPART H)

Release Tracking Number

Remedial System or Monitoring Program: of:

-

A. DESCRIPTION OF ACTIVE OPERATION AND MAINTENANCE ACTIVITY:

1. Type of Active Operation and Maintenance Activity: (check all that apply)

☐ a. Active Remedial System: (check all that apply)

☐ i. NAPL Recovery

☐ ii. Soil Vapor Extraction/Bioventing

☐ iii. Vapor-phase Carbon Adsorption

☐ iv. Groundwater Recovery

☐ v. Dual/Multi-phase Extraction

☐ vi. Aqueous-phase Carbon Adsorption

☐ vii. Air Stripping

☐ viii. Sparging/Biosparging

☐ ix. Cat/Thermal Oxidation

☐ x. Other Describe: _____

☒ b. Active Exposure Pathway Elimination Measure

Active Exposure Pathway Mitigation System to address (check one): ☒ i. Indoor Air ☐ ii. Drinking Water

☐ c. Application of Remedial Additives: (check all that apply)

☐ i. To the Subsurface

☐ ii. To Groundwater (Injection)

☐ iii. To the Surface (Including stockpiled soil)

☐ d. Active Remedial Monitoring Program Without the Application of Remedial Additives: (check all that apply; Sections C, D and E are not required; attach supporting information, data, maps and/or sketches needed by checking Section G5)

☐ i. Reactive Wall

☐ ii. Natural Attenuation

☐ iii. Other

Describe: _____

2. Mode of Operation: (check one)

☒ a. Continuous

☐ b. Intermittent

☐ c. Pulsed

☐ d. One-time Event Only

☐ e. Other: _____

3. System Effluent/Discharge: (check all that apply)

☐ a. Sanitary Sewer (O1)

☐ b. Groundwater Re-infiltration Re-injection: (check one)

☐ i. Downgradient

☐ ii. Upgradient

☒ c. Vapor-phase Discharge to Ambient Air: (check one)

☐ i. Off-gas Controls

☒ ii. No Off-gas Controls

☐ d. Drinking Water Supply

☐ e. Surface Water (including Storm Drains)

☐ f. Other Describe: _____

B. MONITORING FREQUENCY:

1. Reporting period that is the subject of this submittal:

From: 12/6/24

To: 6/15/2025

(mm/dd/yyyy)

(mm/dd/yyyy)

2. Number of monitoring events during the reporting period: (check one)

☐ a. System Startup: (if applicable)

☐ i. Days 1, 3, 6, and then weekly thereafter, for the first month.

☐ ii. Other Describe: _____

☒ b. Post-system Startup (after first month) or Monitoring Program:

☐ i. Monthly

☒ ii. Quarterly

☐ iii. Annually

☐ iv. Other Describe: _____

☐ 3. Check here to certify that the number of required monitoring events were conducted during the reporting period.

C. EFFLUENT/DISCHARGE REGULATION: (check one to indicate how the effluent/discharge limits were established)

☐ 1. NPDES: (check one)

☐ a. Remediation General Permit

☐ b. Individual Permit

☐ c. Emergency Exclusion

Effective Date of Permit: _____

(mm/dd/yyyy)

☒ 2. MCP Performance Standard

MCP Citations(s):

WSC-94-150

☐ 3. DEP Approval Letter

Date of Letter: _____

(mm/dd/yyyy)

☐ 4. Other Describe: _____



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

CRA REMEDIAL MONITORING REPORT

Pursuant to 310 CMR 40.0800 (SUBPART H)

Remedial System or Monitoring Program: of

BWSC108 -A

Release Tracking Number

-

D. WASTEWATER TREATMENT PLANT OPERATOR: (check one)

☐ 1. Required due to Remedial Wastewater Treatment Plant in place for more than 30 days.

a. Name: _____ b. Grade: _____

c. License No: _____ d. License Exp. Date: _____
(mm/dd/yyyy)

☐ 2. Not Required

☒ 3. Not Applicable

E. STATUS OF ACTIVE REMEDIAL SYSTEM, ACTIVE EXPOSURE PATHWAY MITIGATION MEASURE(AEPMM) OR ACTIVE REMEDIAL MONITORING PROGRAM DURING REPORTING PERIOD: (check all that apply)

☒ 1. The Active Remedial System or AEPMM was functional one or more days during the Reporting Period.

a. Days System was Fully Functional: b. GW Recovered (gals): _____

c. NAPL Recovered (gals): _____ d. GW Discharged (gals): _____

e. Avg. Soil Gas Recovery Rate (scfm): f. Avg. Sparging Rate (scfm): _____

☐ 2. Remedial Additives: (check all that apply)

☐ a. No Remedial Additives applied during the Reporting Period.

☐ b. Enhanced Bioremediation Additives applied: (total quantity applied at the site for the current reporting period)

☐ i. Nitrogen/Phosphorus:

☐ ii. Peroxides:

Name of Additive	Date	Quantity	Units

Name of Additive	Date	Quantity	Units

☐ iii. Microorganisms:

☐ iv. Other:

Name of Additive	Date	Quantity	Units

Name of Additive	Date	Quantity	Units

☐ c. Chemical oxidation/reduction additives applied: (total quantity applied at the site for the current reporting period)

☐ i. Permanganates:

☐ ii. Peroxides:

Name of Additive	Date	Quantity	Units

Name of Additive	Date	Quantity	Units

☐ iii. Persulfates:

☐ iv. Other:

Name of Additive	Date	Quantity	Units

Name of Additive	Date	Quantity	Units



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

CRA REMEDIAL MONITORING REPORT

Pursuant to 310 CMR 40.0800 (SUBPART H)

Remedial System or Monitoring Program: 3 of 5

BWSC108 -A

Release Tracking Number

3 - 23246

E. STATUS OF ACTIVE REMEDIAL SYSTEM, AEPMM OR ACTIVE REMEDIAL MONITORING PROGRAM DURING REPORTING PERIOD: (cont.)

☐ d. Other additives applied: (total quantity applied at the site for the current reporting period)

Name of Additive	Date	Quantity	Units

Name of Additive	Date	Quantity	Units

☐ e. Check here if any additional Remedial Additives were applied. Attach list of additional additives and include Name of Additive, Date Applied, Quantity Applied and Units (in gals. or lbs.)

F. SHUTDOWNS OF ACTIVE REMEDIAL SYSTEM, AEPMM OR ACTIVE REMEDIAL MONITORING PROGRAM:

(check all that apply)

☐ 1. The Active Remedial System or AEPMM had unscheduled shutdowns on one or more occasions during the Reporting Period.

a. Number of Unscheduled Shutdowns: _____ b. Total Number of Days of Unscheduled Shutdowns: _____

c. Reason(s) for Unscheduled Shutdowns: _____

☐ 2. The Active Remedial System or AEPMM had scheduled shutdowns on one or more occasions during the Reporting Period.

a. Number of Scheduled Shutdowns: _____ b. Total Number of Days of Scheduled Shutdowns: _____

c. Reason(s) for Scheduled Shutdowns: _____

☐ 3. The Active Remedial System, AEPMM or Active Remedial Monitoring Program was permanently shutdown/discontinued during the Reporting Period.

a. Date of Final System or Monitoring Program Shutdown: _____
(mm/dd/yyyy)

☐ b. No Further Effluent Discharge

☐ c. No Further Application of Remedial Additives planned; sufficient monitoring completed to demonstrate compliance with 310 CMR 40.0046.

☐ d. No Further Submittals Planned.

☐ e. Other: Describe: _____

G. SUMMARY STATEMENTS: (check all that apply for the current reporting period)

☒ 1. All Active Remedial System checks and effluent analyses required by the approved plan and/or permit were performed when applicable.

☒ 2. There were no significant problems or prolonged (>25% of reporting period) unscheduled shutdowns of the Active Remedial System.

☒ 3. The Active Remedial System, AEPMM or Active Remedial Monitoring Program operated in conformance with the MCP, and all applicable approval conditions and/or permits.

4. Indicate any Operational Problems or Notes:

☐ 5. Check here if additional/supporting Information, data, maps, and/or sketches are attached to the form.



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup
CRA REMEDIAL MONITORING REPORT
MEASUREMENTS

BWSC108 -B

Pursuant to 310 CMR 40.0800 (SUBPART H)

Remedial System or Monitoring Program: of:

Release Tracking Number

For each Point of Measurement, related to concentration indicate the highest concentration detected during the reporting period, of each oil, hazardous material and/or remedial additive.

For each Point of Measurement for pressure differentials, indicate the lowest pressure differential detected during the reporting period.

Point of Measurement	Date (mm/dd/yyyy)	Contaminant, Measurement and/or Indicator Parameter	Influent Concentration (where applicable)	Midpoint Concentration (where applicable)	(check one)	Check here, if ND/BDL	Permissible Concentration or Pressure Differential	Units	Within Permissible Limits? (Y/N)
					☒ Discharge ☐ GroundWater Concentration Pressure Differential				
SSDS	01/08/2025	TOTAL VOCS	0.0		0.0	☒	8	PPMV	YES
SSDS	04/24/2025	TOTAL VOCS	0.1		0.0	☒	8	PPMV	YES

☐ Check here if any additional BWSC108 B, Measurements Form(s), are needed.

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Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup
CRA REMEDIAL MONITORING REPORT

BWSC108 -A

Pursuant to 310 CMR 40.0800 (SUBPART H)

Release Tracking Number

Remedial System or Monitoring Program:

4

of:

5

3

- 23246

A. DESCRIPTION OF ACTIVE OPERATION AND MAINTENANCE ACTIVITY:

1. Type of Active Operation and Maintenance Activity: (check all that apply)

☐ a. Active Remedial System: (check all that apply)

☐ i. NAPL Recovery

☐ ii. Soil Vapor Extraction/Bioventing

☐ iii. Vapor-phase Carbon Adsorption

☐ iv. Groundwater Recovery

☐ v. Dual/Multi-phase Extraction

☐ vi. Aqueous-phase Carbon Adsorption

☐ vii. Air Stripping

☐ viii. Sparging/Biosparging

☐ ix. Cat/Thermal Oxidation

☐ x. Other Describe: _____

☒ b. Active Exposure Pathway Elimination Measure

Active Exposure Pathway Mitigation System to address (check one): ☒ i. Indoor Air ☐ ii. Drinking Water

☐ c. Application of Remedial Additives: (check all that apply)

☐ i. To the Subsurface

☐ ii. To Groundwater (Injection)

☐ iii. To the Surface (Including stockpiled soil)

☐ d. Active Remedial Monitoring Program Without the Application of Remedial Additives: (check all that apply; Sections C, D and E are not required; attach supporting information, data, maps and/or sketches needed by checking Section G5)

☐ i. Reactive Wall

☐ ii. Natural Attenuation

☐ iii. Other

Describe: _____

2. Mode of Operation: (check one)

☒ a. Continuous

☐ b. Intermittent

☐ c. Pulsed

☐ d. One-time Event Only

☐ e. Other: _____

3. System Effluent/Discharge: (check all that apply)

☐ a. Sanitary Sewer (01)

☐ b. Groundwater Re-infiltration/Re-injection: (check one)

☐ i. Downgradient

☐ ii. Upgradient

☒ c. Vapor-phase Discharge to Ambient Air: (check one)

☐ i. Off-gas Controls

☒ ii. No Off-gas Controls

☐ d. Drinking Water Supply

☐ e. Surface Water (including Storm Drains)

☐ f. Other Describe: _____

B. MONITORING FREQUENCY:

1. Reporting period that is the subject of this submittal:

From: 12/6/24

To: 6/15/2025

(mm/dd/yyyy)

(mm/dd/yyyy)

2. Number of monitoring events during the reporting period: (check one)

☐ a. System Startup: (if applicable)

☐ i. Days 1, 3, 6, and then weekly thereafter, for the first month.

☐ ii. Other Describe: _____

☒ b. Post-system Startup (after first month) or Monitoring Program:

☐ i. Monthly

☐ ii. Quarterly

☐ iii. Annually

☒ iv. Other Describe: 60 TUFTS QUARTERLY, OTHER PROPERTIES ANNUALLY

☐ 3. Check here to certify that the number of required monitoring events were conducted during the reporting period.

C. EFFLUENT/DISCHARGE REGULATION: (check one to indicate how the effluent/discharge limits were established)

☐ 1. NPDES: (check one)

☐ a. Remediation General Permit

☐ b. Individual Permit

☐ c. Emergency Exclusion

Effective Date of Permit: _____

(mm/dd/yyyy)

☒ 2. MCP Performance Standard

MCP Citations(s):

WSC-94-150

☐ 3. DEP Approval Letter

Date of Letter: _____

(mm/dd/yyyy)

☐ 4. Other Describe: _____



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

CRA REMEDIAL MONITORING REPORT

Pursuant to 310 CMR 40.0800 (SUBPART H)

Remedial System or Monitoring Program: 4 of 5

BWSC108 -A

Release Tracking Number

3 - 23246

D. WASTEWATER TREATMENT PLANT OPERATOR: (check one)

☐ 1. Required due to Remedial Wastewater Treatment Plant in place for more than 30 days.

a. Name: _____ b. Grade: _____

c. License No: _____ d. License Exp. Date: _____
(mm/dd/yyyy)

☐ 2. Not Required

☒ 3. Not Applicable

E. STATUS OF ACTIVE REMEDIAL SYSTEM, ACTIVE EXPOSURE PATHWAY MITIGATION MEASURE(AEPM) OR ACTIVE REMEDIAL MONITORING PROGRAM DURING REPORTING PERIOD: (check all that apply)

☒ 1. The Active Remedial System or AEPM was functional one or more days during the Reporting Period.

a. Days System was Fully Functional: 182 b. GW Recovered (gals): _____

c. NAPL Recovered (gals): _____ d. GW Discharged (gals): _____

e. Avg. Soil Gas Recovery Rate (scfm): 128 f. Avg. Sparging Rate (scfm): _____

☐ 2. Remedial Additives: (check all that apply)

☐ a. No Remedial Additives applied during the Reporting Period.

☐ b. Enhanced Bioremediation Additives applied: (total quantity applied at the site for the current reporting period)

☐ i. Nitrogen/Phosphorus:

☐ ii. Peroxides:

Name of Additive	Date	Quantity	Units

Name of Additive	Date	Quantity	Units

☐ iii. Microorganisms:

☐ iv. Other:

Name of Additive	Date	Quantity	Units

Name of Additive	Date	Quantity	Units

☐ c. Chemical oxidation/reduction additives applied: (total quantity applied at the site for the current reporting period)

☐ i. Permanganates:

☐ ii. Peroxides:

Name of Additive	Date	Quantity	Units

Name of Additive	Date	Quantity	Units

☐ iii. Persulfates:

☐ iv. Other:

Name of Additive	Date	Quantity	Units

Name of Additive	Date	Quantity	Units



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

CRA REMEDIAL MONITORING REPORT

Pursuant to 310 CMR 40.0800 (SUBPART H)

Remedial System or Monitoring Program: 4 of 5

BWSC108 -A

Release Tracking Number

3 - 23246

E. STATUS OF ACTIVE REMEDIAL SYSTEM, AEPMM OR ACTIVE REMEDIAL MONITORING PROGRAM DURING REPORTING PERIOD: (cont.)

☐ d. Other additives applied: (total quantity applied at the site for the current reporting period)

Name of Additive	Date	Quantity	Units

Name of Additive	Date	Quantity	Units

☐ e. Check here if any additional Remedial Additives were applied. Attach list of additional additives and include Name of Additive, Date Applied, Quantity Applied and Units (in gals. or lbs.)

F. SHUTDOWNS OF ACTIVE REMEDIAL SYSTEM, AEPMM OR ACTIVE REMEDIAL MONITORING PROGRAM:

(check all that apply)

☐ 1. The Active Remedial System or AEPMM had unscheduled shutdowns on one or more occasions during the Reporting Period.

a. Number of Unscheduled Shutdowns: _____ b. Total Number of Days of Unscheduled Shutdowns: _____

c. Reason(s) for Unscheduled Shutdowns: _____

☐ 2. The Active Remedial System or AEPMM had scheduled shutdowns on one or more occasions during the Reporting Period.

a. Number of Scheduled Shutdowns: _____ b. Total Number of Days of Scheduled Shutdowns: _____

c. Reason(s) for Scheduled Shutdowns: _____

☐ 3. The Active Remedial System, AEPMM or Active Remedial Monitoring Program was permanently shutdown/discontinued during the Reporting Period.

a. Date of Final System or Monitoring Program Shutdown: _____
(mm/dd/yyyy)

☐ b. No Further Effluent Discharge

☐ c. No Further Application of Remedial Additives planned; sufficient monitoring completed to demonstrate compliance with 310 CMR 40.0046.

☐ d. No Further Submittals Planned.

☐ e. Other: Describe: _____

G. SUMMARY STATEMENTS: (check all that apply for the current reporting period)

☒ 1. All Active Remedial System checks and effluent analyses required by the approved plan and/or permit were performed when applicable.

☒ 2. There were no significant problems or prolonged (>25% of reporting period) unscheduled shutdowns of the Active Remedial System.

☒ 3. The Active Remedial System, AEPMM or Active Remedial Monitoring Program operated in conformance with the MCP, and all applicable approval conditions and/or permits.

4. Indicate any Operational Problems or Notes:

☐ 5. Check here if additional/supporting Information, data, maps, and/or sketches are attached to the form.



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup
CRA REMEDIAL MONITORING REPORT
MEASUREMENTS

BWSC108 -B

Pursuant to 310 CMR 40.0800 (SUBPART H)

Remedial System or Monitoring Program:

of:

Release Tracking Number

For each Point of Measurement, related to concentration indicate the highest concentration detected during the reporting period, of each oil, hazardous material and/or remedial additive.

For each Point of Measurement for pressure differentials, indicate the lowest pressure differential detected during the reporting period.

Point of Measurement	Date (mm/dd/yyyy)	Contaminant, Measurement and/or Indicator Parameter	Influent Concentration (where applicable)	Midpoint Concentration (where applicable)	Groundwater Concentration	Check here, if ND/BDL	Permissible Concentration	Units	Within Permissible Limits? (Y/N)
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☐ Check here if any additional BWSC108 B, Measurements Form(s), are needed.

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Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup
CRA REMEDIAL MONITORING REPORT

BWSC108 -A

Pursuant to 310 CMR 40.0800 (SUBPART H)

Release Tracking Number

Remedial System or Monitoring Program:

5

of: 5

3

- 23246

A. DESCRIPTION OF ACTIVE OPERATION AND MAINTENANCE ACTIVITY:

1. Type of Active Operation and Maintenance Activity: (check all that apply)

☐ a. Active Remedial System: (check all that apply)

☐ i. NAPL Recovery

☐ ii. Soil Vapor Extraction/Bioventing

☐ iii. Vapor-phase Carbon Adsorption

☐ iv. Groundwater Recovery

☐ v. Dual/Multi-phase Extraction

☐ vi. Aqueous-phase Carbon Adsorption

☐ vii. Air Stripping

☐ viii. Sparging/Biosparging

☐ ix. Cat/Thermal Oxidation

☐ x. Other Describe: _____

☐ b. Active Exposure Pathway Elimination Measure

Active Exposure Pathway Mitigation System to address (check one): ☐ i. Indoor Air ☐ ii. Drinking Water

☐ c. Application of Remedial Additives: (check all that apply)

☐ i. To the Subsurface

☐ ii. To Groundwater (Injection)

☐ iii. To the Surface (Including stockpiled soil)

☒ d. Active Remedial Monitoring Program Without the Application of Remedial Additives: (check all that apply; Sections C, D and E are not required; attach supporting information, data, maps and/or sketches needed by checking Section G5)

☐ i. Reactive Wall

☒ ii. Natural Attenuation

☐ iii. Other

Describe: _____

2. Mode of Operation: (check one)

☐ a. Continuous

☐ b. Intermittent

☐ c. Pulsed

☐ d. One-time Event Only

☐ e. Other: _____

3. System Effluent/Discharge: (check all that apply)

☐ a. Sanitary Sewer (01)

☐ b. Groundwater Re-infiltration Re-injection: (check one)

☐ i. Downgradient

☐ ii. Upgradient

☐ c. Vapor-phase Discharge to Ambient Air: (check one)

☐ i. Off-gas Controls

☐ ii. No Off-gas Controls

☐ d. Drinking Water Supply

☐ e. Surface Water (including Storm Drains)

☐ f. Other Describe: _____

B. MONITORING FREQUENCY:

1. Reporting period that is the subject of this submittal:

From: 12/6/24

To: 6/15/2025

(mm/dd/yyyy)

(mm/dd/yyyy)

2. Number of monitoring events during the reporting period: (check one)

☐ a. System Startup: (if applicable)

☐ i. Days 1, 3, 6, and then weekly thereafter, for the first month.

☐ ii. Other Describe: _____

☒ b. Post-system Startup (after first month) or Monitoring Program:

☐ i. Monthly

☐ ii. Quarterly

☒ iii. Annually

☐ iv. Other Describe: _____

☐ 3. Check here to certify that the number of required monitoring events were conducted during the reporting period.

C. EFFLUENT/DISCHARGE REGULATION: (check one to indicate how the effluent/discharge limits were established)

☐ 1. NPDES: (check one)

☐ a. Remediation General Permit

☐ b. Individual Permit

☐ c. Emergency Exclusion

Effective Date of Permit: _____

(mm/dd/yyyy)

☐ 2. MCP Performance Standard

MCP Citations(s): _____

☐ 3. DEP Approval Letter

Date of Letter: _____

(mm/dd/yyyy)

☐ 4. Other Describe: _____



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

CRA REMEDIAL MONITORING REPORT

Pursuant to 310 CMR 40.0800 (SUBPART H)

Remedial System or Monitoring Program: of

BWSC108 -A

Release Tracking Number

-

D. WASTEWATER TREATMENT PLANT OPERATOR: (check one)

- ☐ 1. Required due to Remedial Wastewater Treatment Plant in place for more than 30 days.
a. Name: _____ b. Grade: _____
c. License No: _____ d. License Exp. Date: _____
(mm/dd/yyyy)
- ☐ 2. Not Required
- ☒ 3. Not Applicable

E. STATUS OF ACTIVE REMEDIAL SYSTEM, ACTIVE EXPOSURE PATHWAY MITIGATION MEASURE(AEPMM) OR ACTIVE REMEDIAL MONITORING PROGRAM DURING REPORTING PERIOD: (check all that apply)

- ☐ 1. The Active Remedial System or AEPMM was functional one or more days during the Reporting Period.
- a. Days System was Fully Functional: _____ b. GW Recovered (gals): _____
c. NAPL Recovered (gals): _____ d. GW Discharged (gals): _____
e. Avg. Soil Gas Recovery Rate (scfm): _____ f. Avg. Sparging Rate (scfm): _____
- ☐ 2. Remedial Additives: (check all that apply)
- ☐ a. No Remedial Additives applied during the Reporting Period.
- ☐ b. Enhanced Bioremediation Additives applied: (total quantity applied at the site for the current reporting period)
- ☐ i. Nitrogen/Phosphorus: ☐ ii. Peroxides:

Name of Additive	Date	Quantity	Units

Name of Additive	Date	Quantity	Units

☐ iii. Microorganisms:

☐ iv. Other:

Name of Additive	Date	Quantity	Units

Name of Additive	Date	Quantity	Units

☐ c. Chemical oxidation/reduction additives applied: (total quantity applied at the site for the current reporting period)

☐ i. Permanganates:

☐ ii. Peroxides:

Name of Additive	Date	Quantity	Units

Name of Additive	Date	Quantity	Units

☐ iii. Persulfates:

☐ iv. Other:

Name of Additive	Date	Quantity	Units

Name of Additive	Date	Quantity	Units



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

CRA REMEDIAL MONITORING REPORT

Pursuant to 310 CMR 40.0800 (SUBPART H)

Remedial System or Monitoring Program: 5 of 5

BWSC108 -A

Release Tracking Number

3 - 23246

E. STATUS OF ACTIVE REMEDIAL SYSTEM, AEPMM OR ACTIVE REMEDIAL MONITORING PROGRAM DURING REPORTING PERIOD: (cont.)

☐ d. Other additives applied: (total quantity applied at the site for the current reporting period)

Name of Additive	Date	Quantity	Units

Name of Additive	Date	Quantity	Units

☐ e. Check here if any additional Remedial Additives were applied. Attach list of additional additives and include Name of Additive, Date Applied, Quantity Applied and Units (in gals. or lbs.)

F. SHUTDOWNS OF ACTIVE REMEDIAL SYSTEM, AEPMM OR ACTIVE REMEDIAL MONITORING PROGRAM:

(check all that apply)

☐ 1. The Active Remedial System or AEPMM had unscheduled shutdowns on one or more occasions during the Reporting Period.

a. Number of Unscheduled Shutdowns: b. Total Number of Days of Unscheduled Shutdowns:

c. Reason(s) for Unscheduled Shutdowns:

☐ 2. The Active Remedial System or AEPMM had scheduled shutdowns on one or more occasions during the Reporting Period.

a. Number of Scheduled Shutdowns: b. Total Number of Days of Scheduled Shutdowns:

c. Reason(s) for Scheduled Shutdowns:

☐ 3. The Active Remedial System, AEPMM or Active Remedial Monitoring Program was permanently shutdown/discontinued during the Reporting Period.

a. Date of Final System or Monitoring Program Shutdown: (mm/dd/yyyy)

☐ b. No Further Effluent Discharge

☐ c. No Further Application of Remedial Additives planned; sufficient monitoring completed to demonstrate compliance with 310 CMR 40.0046.

☐ d. No Further Submittals Planned.

☐ e. Other: Describe:

G. SUMMARY STATEMENTS: (check all that apply for the current reporting period)

☒ 1. All Active Remedial System checks and effluent analyses required by the approved plan and/or permit were performed when applicable.

☒ 2. There were no significant problems or prolonged (>25% of reporting period) unscheduled shutdowns of the Active Remedial System.

☒ 3. The Active Remedial System, AEPMM or Active Remedial Monitoring Program operated in conformance with the MCP, and all applicable approval conditions and/or permits.

4. Indicate any Operational Problems or Notes:

☒ 5. Check here if additional/supporting Information, data, maps, and/or sketches are attached to the form.

Additional supporting information for:

**COMPREHENSIVE RESPONSE ACTION TRANSMITTAL
FORM & PHASE I COMPLETION STATEMENT**

Pursuant to 310 CMR 40.0484 (Subpart D) and 40.0800 (Subpart H)

BWSC-108, Section B, Question 15 and 18: Submit a **Phase V Status Report**, pursuant to 310 CMR 40.0893(2).

The Phase V Status Report has been submitted via eDEP, Transmittal No. 1754278, as "Phase V Status Report No. 28 and Remedial Monitoring Report No. 43," RTN 3-23246, 50 Tufts Street, Somerville, Massachusetts, dated August 5, 2025.

Additional supporting information for:

CRA REMEDIAL MONITORING REPORT

Pursuant to 310 CMR 40.0800 (Subpart H)

BWSC-108A, Remedial System 5 of 5, Section G, Question 5: **SUMMARY STATEMENTS:**

Check here if additional/supporting Information, data, maps, and/or sketches are attached to the form.

The Summary Statement for BWSC-108A Remedial System 5 of 5 has been submitted via eDEP, Transmittal No. 1754278 as part of the "Phase V Status Report No. 28 and Remedial Monitoring Report No. 43," RTN 3-23246, 50 Tufts Street, Somerville, Massachusetts, dated August 5, 2025.

Appendix B Property Owner Notification Letters

June 12, 2025
Project No. 04516-3

Ms. Vera Rodrigues
Hodan Property Management
105 Washington Street
Somerville, MA 02143

**Re: MCP Closure Document for 103 Washington Street
50 Tufts Street Site, Somerville, Massachusetts
MassDEP RTN 3-23246**

Dear Ms. Rodrigues:

On behalf of UniFirst Corporation (UniFirst) of Wilmington, Massachusetts, and in accordance with the Massachusetts Contingency Plan (MCP; 310 CMR 40.1406), GEI Consultants, Inc. is providing you with the attached "Partial Permanent Solution Statement for 103 Washington Street, Somerville, Massachusetts" (the Property). As you are aware, GEI has been investigating environmental conditions in the vicinity of the 50 Tufts Street property in Somerville, Massachusetts (the Site) for the past several years in accordance with the MCP. Your Property (103 Washington Street) was part of that investigation. Figure 2 in the enclosed document shows the Property in relation to the Site boundary. The Site is identified by Massachusetts Department of Environmental Protection (MassDEP) Release Tracking Number (RTN) 3-23246.

As stated in the enclosed document, GEI has determined, as a result of assessment actions, that a level of No Significant Risk (NSR) exists under the MCP and, therefore, no remedial actions are necessary with respect to the Property. In the MCP, such an outcome is a form of regulatory endpoint referred to as a Permanent Solution with No Conditions.

A copy of the enclosed document is being submitted to you in accordance with the MCP. You do not need to respond to this letter. However, if you have any questions, please feel free to contact me at 781.721.4012 or at igladstone@geiconsultants.com.

Sincerely,

GEI CONSULTANTS, INC.



Christopher Coner, CHMM
Project Manager



Ileen S. Gladstone, P.E., LSP, LEED AP
Senior Vice President

Enclosures

cc: Catherine Malagrida, UniFirst Corporation
Massachusetts Department of Environmental Protection

CC/ISG:bdp
B:\Private\04516\19.0 Reports in Progress\19.10 Partial RAOs\Wave 2-VI at NSR\Washington Street\103 Washington Street\App B - Public Notice Letters\103 Washington Street Transmittal Ltr PSWNC-P.docx



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC122

This notice is related to:
Release Tracking Number

INFORMATIONAL NOTICE TO PROPERTY OWNERS

3 - 23246

As Required by 310 CMR 40.1406 of the Massachusetts Contingency Plan (MCP)

A. DISPOSAL SITE ADDRESS: (associated with Release Tracking Number provided above)

1. Street Address: 50 Tufts Street

2. City/Town: Somerville 3. ZIP Code: 02145-4129

4. Assessor's Parcel ID: 93-C-3

B. THIS NOTICE IS BEING PROVIDED TO THE FOLLOWING PROPERTY OWNER:

1. Name of Property Owner: Clover Leaf Capital Holdings LLC

2. Address of Property For Which This Notice is Being Provided: (property owned by person named in B1)

a. Street Address: 103 Washington Street

b. City/Town: Somerville c. ZIP Code: 02143-4441

3. Assessor's Parcel ID: 104-A-60

C. THIS NOTICE IS BEING GIVEN : (check one)

- ☐ 1. Upon Completion of a Phase II Comprehensive Site Assessment.
- ☒ 2. Upon Submittal of a Permanent or Temporary Solution Statement (i.e., Site Closure Report).
- ☐ 3. Upon Completion of Additional Investigation showing that Oil or Hazardous Material is not Present at the Property.

D. DESCRIPTION OF OIL AND/OR HAZARDOUS MATERIAL PRESENT OR LIKELY TO BE PRESENT AT THE PROPERTY :
(check all that apply)

AFFECTED ENVIRONMENTAL MEDIA

PRINCIPAL CHEMICAL(S) PRESENT

- | | |
|---|--|
| ☒ 1. Soil | <u>Volatile Organic Compounds (VOCs)</u> |
| ☒ 2. Groundwater | <u>Volatile Organic Compounds (VOCs)</u> |
| ☐ 3. Surface Water | <u></u> |
| ☐ 4. Sediment | <u></u> |
| ☒ 5. Indoor Air | <u>Volatile Organic Compounds (VOCs)</u> |
| ☒ 6. Soil Gas | <u>Volatile Organic Compounds (VOCs)</u> |
| ☐ 7. Other: <u>(specify)</u> | <u></u> |

E. ATTACHMENTS PROVIDED WITH THIS NOTICE, AS REQUIRED BY 310 CMR 40.1406:

- ☒ 1. A Copy of the Map Showing or a Description Describing the Area where the Oil and/or Hazardous Material is or is likely to be Present.
- ☒ 2. A Copy of the Phase II Comprehensive Site Assessment or Permanent or Temporary Solution Statement Conclusions.
- ☒ 3. Specify the category of Solution that applies to the Disposal Site.
- ☒ 1. Permanent Solution with No Conditions.
- ☐ 2. Permanent Solution with Conditions.
- ☐ i. An Activity and Use Limitation has been implemented.
- ☐ ii. An Activity and Use Limitation has not been implemented.
- ☐ 3. Temporary Solution.



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC122

This notice is related to:
Release Tracking Number

INFORMATIONAL NOTICE TO PROPERTY OWNERS

3 - 23246

As Required by 310 CMR 40.1406 of the Massachusetts Contingency Plan (MCP)

F. CONTACT INFORMATION RELATING TO THE PARTY PROVIDING THIS NOTICE:

- | | |
|--|--|
| 1. Name of Organization: <u>UniFirst Corporation</u> | |
| 2. Contact First Name: <u>Catherine</u> | 3. Last Name: <u>Malagrida</u> |
| 4. Street: <u>68 Jonspin Road</u> | 5. Title: <u>Environmental Compliance Manager</u> |
| 6. City/Town: <u>Wilmington</u> | 7. State: <u>MA</u> 8. ZIP Code: <u>01887-1090</u> |
| 9. Telephone: <u>(978) 658-8888</u> | 10. Email: <u>catherine_malagrida@unifirst.com</u> |

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1406. The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party(ies) who is/are addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form.

PURPOSE OF THIS NOTICE

Parties who are taking actions to respond to releases of oil or hazardous material to the environment are required by state regulations (referred to above) to notify the owners of property where the oil or hazardous material is or is likely to be present. These same parties are also required to notify property owners upon completion of actions to address the oil or hazardous material, or if additional investigations show that the oil or hazardous material is not present at a property. **Section C** on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time.

INFORMATION RELATED TO YOUR PROPERTY

Section D on the reverse side of this form indicates the type(s) of oil or hazardous material that is or is likely to be present at your property, and the environmental medium (e.g., soil or groundwater) where it is or is likely to be present. **Please note** that when an investigation indicates that the oil or hazardous material is or is likely to be present at your property, this does not mean that the oil or hazardous material is posing a health risk to you. Parties who are taking actions to address oil and hazardous material releases are required by state regulations to adequately investigate these releases and take necessary actions to ensure that affected properties meet standards that are protective of human health and the environment.

ATTACHED MAP OR DESCRIPTION AND REPORT CONCLUSIONS

The party providing this notice to you is required to attach a map or description that indicates the boundaries of the area where the oil or hazardous material is or is likely to be present, and the conclusions of the site investigation or closure report (**Section E**). These attachments should give you additional information about the nature and location of the oil or hazardous material with respect to your property.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at <http://www.mass.gov/eea/agencies/massdep/cleanup>.

For more information regarding this notice, you may contact the party listed in **Section F** of this form. Information about the disposal site identified in **Section A** is also available in files at the Massachusetts Department of Environmental Protection.

See <http://public.dep.state.ma.us/SearchableSites2/Search.aspx> to view site-specific files on-line or <http://mass.gov/eea/agencies/massdep/about/contacts/conduct-a-file-review.html> if you would like to make an appointment to see these files in person. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

January 22, 2025
Project No. 045163

Ms. Kimberly Wells
City of Somerville Clerk
93 Highland Avenue, 1st Floor
Somerville, MA 02143

**Re: Groundwater Sampling
Certain "Public Ways" and Capuno Early Childhood Center
Somerville, Massachusetts**

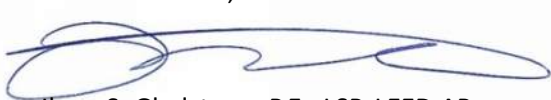
Dear Ms. Wells:

Thank you for permitting GEI to conduct groundwater sampling on certain public ways and at Capuano Early Childhood Center in Somerville, Massachusetts. We are providing you with a "Notice of Environmental Sampling Form (BWSC-123)," as required by the Massachusetts Department of Environmental Protection (MassDEP), following groundwater sampling in January 2025.

Thank you for your continued assistance. Please contact me at 781-721-4012 or igladstone@geiconsultants.com if you have any questions.

Sincerely,

GEI Consultants, Inc



Ileen S. Gladstone, P.E., LSP, LEED AP
Senior Vice President

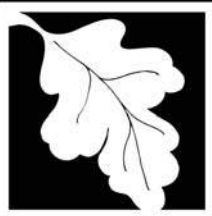


Christopher Coner, CHMM
Project Manager

MEF/CC:jam

B:\Private\04516\2.0 Correspondence\2.12 Subsurface\2.12.2 Groundwater Evaluation\2025\January 2025 Sampling\City\GW NOS\City 1-2025 GW NOS Ltr.docx

cc: Catherine Malagrida, UniFirst Corporation
Jill Lathan, City of Somerville
MassDEP NERO (as part of Status Report)



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

3 - 23246

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: 50 Tufts Street
City/Town: Somerville Zip Code: 02145-4129

B. This notice is being provided to the following party:

1. Name: Ms. Kimberly Wells
2. Street Address: 93 Highland Ave, 1st Floor
City/Town: Somerville, MA Zip Code: 02143

C. This notice is being given to inform its recipient (the party listed in Section B):

- ☒ 1. That environmental sampling ~~will be~~/has been conducted at property owned by the recipient of this notice.
- ☐ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.
- ☐ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling ~~will be~~/has been conducted:

1. Street Address: City of Somerville streets and Capuano Early Childhood Center
City/Town: Somerville, MA Zip Code: 02145
2. MCP phase of work during which the sampling will be/has been conducted:
- | | |
|---|--|
| ☐ Immediate Response Action | ☐ Phase III Feasibility Evaluation |
| ☐ Release Abatement Measure | ☐ Phase IV Remedy Implementation Plan |
| ☐ Utility-related Abatement Measure | ☒ Phase V/Remedy Operation Status |
| ☐ Phase I Initial Site Investigation | ☐ Post-Temporary Solution Operation, Maintenance and Monitoring |
| ☐ Phase II Comprehensive Site Assessment | ☐ Other _____ |
- (specify)
3. Description of property where sampling ~~will be~~/has been conducted:
- ☐ residential ☐ commercial ☐ industrial ☒ school/playground ☒ Other City Streets
- (specify)
4. Description of the sampling locations and types (e.g., soil, groundwater, indoor air, soil gas) to the extent known at the time of this notice.

Semi-Annual Groundwater Sampling

E. Contact information related to the party providing this notice:

Contact Name: Ileen Gladstone, P.E., LSP, LEED AP
Street Address: GEI Consultants, Inc., 400 Unicorn Park Drive
City/Town: Woburn, MA Zip Code: 01801-3341
Telephone: (781) 721-4012 Email: igladstone@geiconsultants.com



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

3

- 23246

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation of a release for which a notification to MassDEP has been made under the Massachusetts Contingency Plan (310 CMR 40.0300) on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at <http://www.mass.gov/eea/agencies/massdep/cleanup>. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See <http://public.dep.state.ma.us/SearchableSites2/Search.aspx> to view site-specific files on-line or <http://mass.gov/eea/agencies/massdep/about/contacts/conduct-a-file-review.html> if you would like to make an appointment to see these files in person. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

March 19, 2025
Project No. 045163

Ms. Kimberly Wells
City of Somerville Clerk
93 Highland Avenue, 1st Floor
Somerville, MA 02143

**Re: Groundwater Sampling
Certain "Public Ways" and Capuano School, Somerville, Massachusetts,
MassDEP RTN 3-23246**

Dear Ms. Wells:

On behalf of UniFirst Corporation, GEI Consultants, Inc. is providing results for groundwater samples collected on January 20, 2025, from groundwater monitoring wells located on municipal property. The sampling was conducted as part of our investigation related to the site at 50 Tufts Street in Somerville, Massachusetts. We collected groundwater samples from two shallow monitoring wells (MW301 and MW115R).

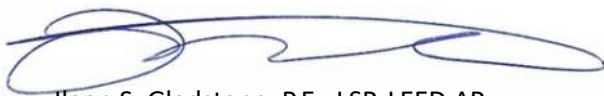
Groundwater samples were submitted for chemical testing for volatile organic compounds (VOCs). We have attached a summary table of the chemicals detected in the groundwater samples along with the previous sampling results, the laboratory data sheets for the recent sampling, and a figure showing the sampling locations. Thank you for permitting GEI to conduct groundwater sampling on certain public ways and the Capuano School in Somerville, Massachusetts.

Individuals and public officials may request additional public involvement activities under the Massachusetts Contingency Plan (MCP; 310 CMR 40.1403[9] and 40.1404). The property owner may also request additional documentation, such as that listed at 310 CMR 40.0017(3), associated with the above-referenced samples. We will provide such additional documentation within 30 days of our receipt of such a request.

We appreciate your continued cooperation throughout the sampling process. If you have any immediate questions regarding the water testing results, please do not hesitate to contact me at 781-721-4012 or igladstone@geiconsultants.com.

Sincerely,

GEI Consultants, Inc



Ileen S. Gladstone, P.E., LSP, LEED AP
Senior Vice President



Christopher Coner, CHMM
Project Manager

MEF/DJM:jam

B:\Private\04516\2.0 Correspondence\2.12 Subsurface\2.12.2 Groundwater Evaluation\2025\January 2025 Sampling\City\GW Results\City 2025 Jan GW Results Ltr.docx

cc: Catherine Malagrida, UniFirst Corporation
Jill Lathan, City of Somerville
MassDEP NERO (as part of Status Report)



**Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup**

BWSC123

This Notice is Related to:
Release Tracking Number

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

3 - 23246

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: 50 Tufts Street
City/Town: Somerville Zip Code: 02145-4129

B. This notice is being provided to the following party:

1. Name: Ms. Kimberly Wells
2. Street Address: 93 Highland Ave, 1st Floor
City/Town: Somerville, MA Zip Code: 02143

C. This notice is being given to inform its recipient (the party listed in Section B):

- ☒ 1. That environmental sampling ~~will be~~/has been conducted at property owned by the recipient of this notice.
- ☒ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.
- ☒ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling ~~will be~~/has been conducted:

1. Street Address: Somerville City Streets
City/Town: Somerville, MA Zip Code: 02145
2. MCP phase of work during which the sampling will be/has been conducted:
- | | |
|---|--|
| ☐ Immediate Response Action | ☐ Phase III Feasibility Evaluation |
| ☐ Release Abatement Measure | ☐ Phase IV Remedy Implementation Plan |
| ☐ Utility-related Abatement Measure | ☒ Phase V/Remedy Operation Status |
| ☐ Phase I Initial Site Investigation | ☐ Post-Temporary Solution Operation, Maintenance and Monitoring |
| ☐ Phase II Comprehensive Site Assessment | ☐ Other _____ |
- (specify)
3. Description of property where sampling ~~will be~~/has been conducted:
- ☐ residential ☐ commercial ☐ industrial ☒ school/playground ☒ Other City Streets
- (specify)
4. Description of the sampling locations and types (e.g., soil, groundwater, indoor air, soil gas) to the extent known at the time of this notice.

Groundwater Sampling

E. Contact information related to the party providing this notice:

Contact Name: Ileen Gladstone, P.E., LSP, LEED AP
Street Address: GEI Consultants, Inc., 400 Unicorn Park Drive
City/Town: Woburn, MA Zip Code: 01801-3341
Telephone: (781) 721-4012 Email: igladstone@geiconsultants.com



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

3

- 23246

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation of a release for which a notification to MassDEP has been made under the Massachusetts Contingency Plan (310 CMR 40.0300) on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at <http://www.mass.gov/eea/agencies/massdep/cleanup>. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See <http://public.dep.state.ma.us/SearchableSites2/Search.aspx> to view site-specific files on-line or <http://mass.gov/eea/agencies/massdep/about/contacts/conduct-a-file-review.html> if you would like to make an appointment to see these files in person. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Table 1. Chemical Testing Results - GEI Groundwater Sampling
50 Tufts Street
Somerville, Massachusetts

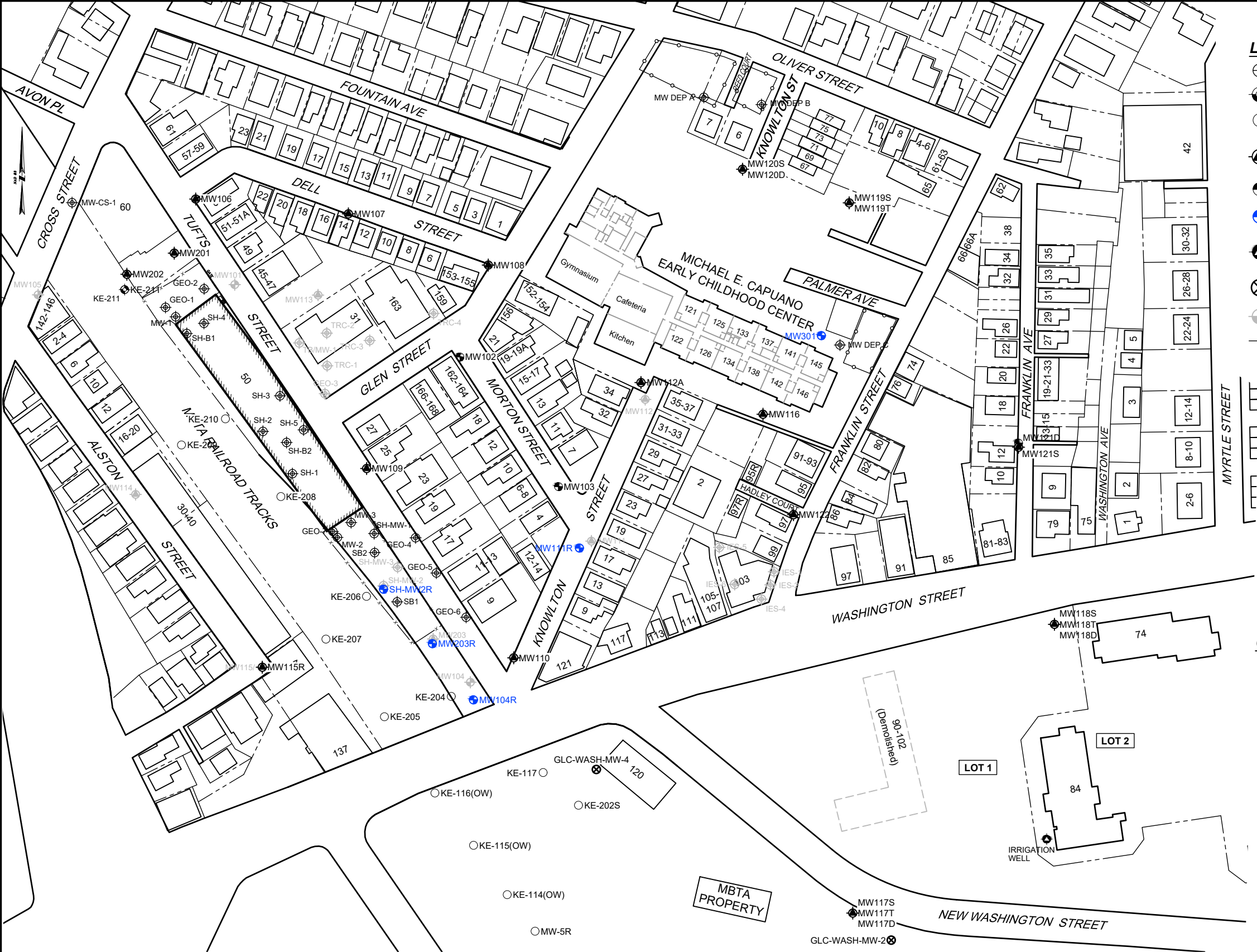
Sample Location: Sample Name: Well Screen Interval (ft bgs): Sample Date: Collected By:					MW115 R	MW115 R	MW301
					MW115 R	MW115 R	MW301
					10 to 25	10 to 25	5 to 15
					4/17/08	1/20/25	1/20/25
					GEI	GEI	GEI
Analyte	Method	Units	Method 1 GW 2 Standard	Method 1 GW 3 Standard			
Volatile Organic Compounds (VOCs)	8260	µg/l					
Acetone			50000	50000	< 5.0	<5.0	<5.0
Benzene			1000	10000	< 0.50	<0.50	<0.50
Bromodichloromethane			6	50000	< 1.0	<1.0	<1.0
2-Butanone (MEK)			50000	50000	< 5.0	<5.0	<5.0
Carbon disulfide			NS	NS	< 5.0	<2.0	<2.0
Carbon tetrachloride			2	5000	< 1.0	<1.0	<1.0
Chlorobenzene			200	1000	< 1.0	<1.0	<1.0
Chloroethane			NS	NS	< 2.0	<2.0	<2.0
Chloroform			50	20000	< 1.0	<1.0	<1.0
Chloromethane			NS	NS	< 2.0	<2.0	<2.0
1,4-Dichlorobenzene			60	8000	< 1.0	<1.0	<1.0
1,1-Dichloroethane			2000	20000	< 1.0	<1.0	<1.0
1,2-Dichloroethane			5	20000	< 1.0	<1.0	<1.0
1,1-Dichloroethylene			80	30000	< 1.0	<1.0	<1.0
cis-1,2-Dichloroethylene			20	50000	< 1.0	<1.0	<1.0
trans-1,2-Dichloroethylene			90	50000	< 1.0	<1.0	<1.0
1,2-Dichloropropane			3	50000	< 2.0	<1.0	<1.0
1,4-Dioxane			5000	50000	< 25	<250	<250
Ethylbenzene			20000	5000	< 1.0	<1.0	<1.0
2-Hexanone			NS	NS	< 5.0	<5.0	<5.0
4-Isopropyltoluene			NS	NS	< 5.0	<2.0	<2.0
Methyl tert-butyl ether			50000	50000	< 1.0	<2.0	<2.0
Methylene chloride			2000	50000	< 2.0	<2.0	<2.0
Naphthalene			700	20000	< 5.0	<2.0	<2.0
Tert-amyl methyl ether			NS	NS	< 2.0	<2.0	<2.0
1,1,1,2-Tetrachloroethane			10	50000	< 5.0	<1.0	<1.0
Tetrachloroethylene (PCE)			20	30000	< 1.0	<1.0	<1.0
Tetrahydrofuran			NS	NS	< 10	<2.0	<2.0
Toluene			50000	40000	< 1.0	<1.0	<1.0
1,1,1-Trichloroethane (TCA)			4000	20000	< 1.0	<1.0	<1.0
1,1,2-Trichloroethane			900	50000	< 1.0	<1.0	<1.0
Trichloroethylene (TCE)			5	5000	< 1.0	<1.0	<1.0
Vinyl chloride			2	50000	< 1.0	<1.0	<1.0
m,p-Xylene			3000	5000	< 1.0	<2.0	<2.0
o-Xylene			3000	5000	< 1.0	<1.0	<1.0
Total Xylene			3000	5000	< 1.0	<1.0	<1.0

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes refer to the laboratory data reports.
2. ft bgs = feet below ground surface.
3. µg/l = micrograms per liter.
4. "<" = The analyte was not detected at a concentration above the specified reporting.
5. SHA = Sanborn Head & Associates.
6. FD = Field Duplicate Sample.
7. NT = Not Tested.
8. * = micrograms CaCO₃ per liter

Qualifying Notes:

- B The analyte found in associated method blank.
- C+ The result has a high bias due to surrogate recovery above upper control limits.
- E The value exceeds the calibration range.
- F+ The result has a high bias due to matrix spike recovery above upper control limits.
- F- The result has a low bias due to matrix spike recovery below lower control limits.
- G The result is estimated due to duplicate precision outside control limits.
- J The reported result is below the laboratory reporting limit and is estimated.
- J+ The reported result is estimated.
- K- The result has a low bias due to blank spike or laboratory control sample recovery below lower control limits.
- K+ The result has a high bias due to blank spike or laboratory control sample recovery above upper control limits.
- R The result is rejected due to gross exceedence of minimum response factor criteria.

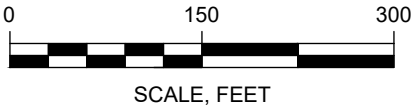


LEGEND:

- ⊕ MONITORING WELL INSTALLED BY TRC, 2014
- ⊙ BORING BY KLEINFELDER, MARCH 2014 AND APRIL 2014
- MONITORING WELL BY KLEINFELDER, SEPTEMBER 2012, MARCH 2014, AND APRIL 2014
- ⊙ MONITORING WELL WITH SOIL VAPOR SAMPLE PORT INSTALLED BY GEI, JANUARY 2007 - JANUARY 2008
- ⊙ MONITORING WELL INSTALLED BY GEI, MAY 2006
- ⊕ MONITORING WELL INSTALLED BY GEI, MAY 2022, MARCH 2024, & OCTOBER 2024
- ⊙ PREVIOUSLY INSTALLED IRRIGATION WELL
- ⊗ GLXC WELL INSTALLED AUGUST 2020
- ⊙ WELLS IN GRAY HAVE BEEN DESTROYED OR DECOMMISSIONED
- x — CHAIN LINK FENCE
- 138 ROOM NUMBER AT CAPUANO SCHOOL
- BOUNDARY OF COMMUNITY GARDENS
- 84 STREET ADDRESS
- MBTA = MASSACHUSETTS BAY TRANSPORTATION AUTHORITY

GENERAL NOTES:

1. MONITORING WELL LOCATIONS AND ELEVATIONS, AND CAPUANO CENTER COMMUNITY GARDEN LOCATIONS WERE ESTABLISHED BY ON THE GROUND SURVEYS BY BSC GROUP, INC.
2. HORIZONTAL CONTROL FOR THIS PLAN WAS ESTABLISHED BY GPS AND IS BASED ON THE NORTH AMERICAN DATUM OF 1983.
3. VERTICAL CONTROL FOR THIS PLAN WAS ESTABLISHED BY GPS AND IS BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988.
4. STREET PROPERTY LINES, AND BUILDINGS ARE BASED ON SOMERVILLE ASSESSORS MAPS AND ARE BEST FIT RELATIVE TO THE LOCATION OF THE 50 TUFTS ST. BUILDING.
5. GEI OBSERVED ABANDONMENT OF SH-MW1 AND SH-1 THROUGH SH-5 IN 2007.



50 Tufts Street Somerville, Massachusetts		MONITORING WELL LOCATIONS	
UniFirst Corporation Wilmington, Massachusetts		Project 04516-3	March 2025

Fig. 1

Project Name: TUFTS STREET**Lab Number:** L2503615**Project Number:** 045163**Report Date:** 01/27/25**SAMPLE RESULTS**

Lab ID: L2503615-03
 Client ID: 045163-MW-115/115R
 Sample Location: SOMERVILLE, MA

Date Collected: 01/20/25 15:30
 Date Received: 01/22/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 141,8260D
 Analytical Date: 01/24/25 08:57
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2503615**Project Number:** 045163**Report Date:** 01/27/25**SAMPLE RESULTS**

Lab ID: L2503615-03
 Client ID: 045163-MW-115/115R
 Sample Location: SOMERVILLE, MA

Date Collected: 01/20/25 15:30
 Date Received: 01/22/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2503615**Project Number:** 045163**Report Date:** 01/27/25**SAMPLE RESULTS**

Lab ID: L2503615-03

Date Collected: 01/20/25 15:30

Client ID: 045163-MW-115/115R

Date Received: 01/22/25

Sample Location: SOMERVILLE, MA

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	102		70-130

Project Name: TUFTS STREET**Lab Number:** L2503615**Project Number:** 045163**Report Date:** 01/27/25**SAMPLE RESULTS**

Lab ID: L2503615-01
 Client ID: 045163-MW-301
 Sample Location: SOMERVILLE, MA

Date Collected: 01/20/25 14:45
 Date Received: 01/22/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 141,8260D
 Analytical Date: 01/24/25 08:31
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2503615**Project Number:** 045163**Report Date:** 01/27/25**SAMPLE RESULTS**

Lab ID: L2503615-01
 Client ID: 045163-MW-301
 Sample Location: SOMERVILLE, MA

Date Collected: 01/20/25 14:45
 Date Received: 01/22/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2503615**Project Number:** 045163**Report Date:** 01/27/25**SAMPLE RESULTS**

Lab ID: L2503615-01
 Client ID: 045163-MW-301
 Sample Location: SOMERVILLE, MA

Date Collected: 01/20/25 14:45
 Date Received: 01/22/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	99		70-130

March 19, 2025
Project No. 045163

Ms. Kimberly Wells
City of Somerville Clerk
93 Highland Avenue, 1st Floor
Somerville, MA 02143

**Re: Groundwater Sampling
Certain "Public Ways"
Somerville, Massachusetts**

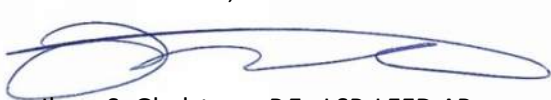
Dear Ms. Wells:

Thank you for permitting GEI to conduct groundwater sampling on certain public ways in Somerville, Massachusetts. We are providing you with a "Notice of Environmental Sampling Form (BWSC-123)," as required by the Massachusetts Department of Environmental Protection (MassDEP), following groundwater sampling in March 2025.

Thank you for your continued assistance. Please contact me at 781-721-4012 or igladstone@geiconsultants.com if you have any questions.

Sincerely,

GEI Consultants, Inc



Ileen S. Gladstone, P.E., LSP, LEED AP
Senior Vice President

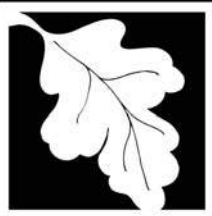


Christopher Coner, CHMM
Project Manager

MEF/CC:jam

B:\Private\04516\2.0 Correspondence\2.12 Subsurface\2.12.2 Groundwater Evaluation\2025\March 2025 Sampling\City\GW NOS\City 3-2025 GW NOS Ltr.docx

cc: Catherine Malagrida, UniFirst Corporation
Jill Lathan, City of Somerville
MassDEP NERO (as part of Status Report)



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

3 - 23246

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: 50 Tufts Street
City/Town: Somerville Zip Code: 02145-4129

B. This notice is being provided to the following party:

1. Name: Ms. Kimberly Wells
2. Street Address: 93 Highland Ave, 1st Floor
City/Town: Somerville, MA Zip Code: 02143

C. This notice is being given to inform its recipient (the party listed in Section B):

- ☒ 1. That environmental sampling ~~will be~~/has been conducted at property owned by the recipient of this notice.
- ☐ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.
- ☐ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling ~~will be~~/has been conducted:

1. Street Address: City of Somerville sidewalks
City/Town: Somerville, MA Zip Code: 02145
2. MCP phase of work during which the sampling will be/has been conducted:
- | | |
|---|--|
| ☐ Immediate Response Action | ☐ Phase III Feasibility Evaluation |
| ☐ Release Abatement Measure | ☐ Phase IV Remedy Implementation Plan |
| ☐ Utility-related Abatement Measure | ☒ Phase V/Remedy Operation Status |
| ☐ Phase I Initial Site Investigation | ☐ Post-Temporary Solution Operation, Maintenance and Monitoring |
| ☐ Phase II Comprehensive Site Assessment | ☐ Other _____ |
- (specify)
3. Description of property where sampling ~~will be~~/has been conducted:
- ☐ residential ☐ commercial ☐ industrial ☐ school/playground ☒ Other City Streets
- (specify)
4. Description of the sampling locations and types (e.g., soil, groundwater, indoor air, soil gas) to the extent known at the time of this notice.

Groundwater Sampling

E. Contact information related to the party providing this notice:

Contact Name: Ileen Gladstone, P.E., LSP, LEED AP
Street Address: GEI Consultants, Inc., 400 Unicorn Park Drive
City/Town: Woburn, MA Zip Code: 01801-3341
Telephone: (781) 721-4012 Email: igladstone@geiconsultants.com



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

3 - 23246

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation of a release for which a notification to MassDEP has been made under the Massachusetts Contingency Plan (310 CMR 40.0300) on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at <http://www.mass.gov/eea/agencies/massdep/cleanup>. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See <http://public.dep.state.ma.us/SearchableSites2/Search.aspx> to view site-specific files on-line or <http://mass.gov/eea/agencies/massdep/about/contacts/conduct-a-file-review.html> if you would like to make an appointment to see these files in person. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.



Consulting
Engineers and
Scientists

April 22, 2025
Project 04516-3

Ms. Kimberly Wells
City Clerk
93 Highland Avenue, 1st Floor
Somerville, MA 02143

Dear Ms. Wells:

**Re: Groundwater Sampling
Certain "Public Ways", 90 Washington Street, and
Michael E. Capuano Early Childhood Center
Somerville, Massachusetts**

Thank you for permitting GEI to conduct groundwater sampling at the Capuano Early Childhood Center, 90 Washington Street, and on certain public ways in Somerville, Massachusetts. Following groundwater sampling, we are providing you with a "Notice of Environmental Sampling Form (BWSC-123)," as required by the Massachusetts Department of Environmental Protection (MassDEP).

Thank you for your continued assistance. Please contact me at 781-721-4012 or igladstone@geiconsultants.com if you have any questions.

Sincerely,

GEI CONSULTANTS, INC.

A blue ink signature of Ileen S. Gladstone, consisting of a large, stylized loop followed by a horizontal line.

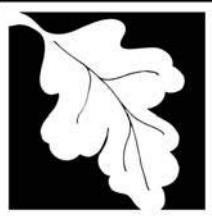
Ileen S. Gladstone, P.E., LSP, LEED AP
Senior Vice President

A black ink signature of Christopher Coner, written in a cursive style.

Christopher Coner, CHMM
Project Manager

MEF:jam
Enclosure

c: Rubén Carmona, Somerville Public School - Superintendent
Felix Caraballo, Capuano Early Childhood Center - Principal
Jill Lathan, City of Somerville
Amara Anosike, JD, Somerville Public Schools
Catherine Malagrida, UniFirst Corporation
MassDEP-NERO (as part of Status Report)



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

3 - 23246

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: 50 Tufts Street
City/Town: Somerville Zip Code: 02145-4129

B. This notice is being provided to the following party:

1. Name: Ms. Kimberly Wells, City Clerk
2. Street Address: 93 Highland Avenue, 1st Floor
City/Town: Somerville, MA Zip Code: 02143

C. This notice is being given to inform its recipient (the party listed in Section B):

- ☒ 1. That environmental sampling ~~will be~~/has been conducted at property owned by the recipient of this notice.
- ☐ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.
- ☐ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling ~~will be~~/has been conducted:

1. Street Address: Capuano Center, 90 Washington Street, Somerville City Streets
City/Town: Somerville, MA Zip Code: 02145
2. MCP phase of work during which the sampling ~~will be~~/has been conducted:
- | | |
|---|--|
| ☐ Immediate Response Action | ☐ Phase III Feasibility Evaluation |
| ☐ Release Abatement Measure | ☐ Phase IV Remedy Implementation Plan |
| ☐ Utility-related Abatement Measure | ☒ Phase V/Remedy Operation Status |
| ☐ Phase I Initial Site Investigation | ☐ Post-Temporary Solution Operation, Maintenance and Monitoring |
| ☐ Phase II Comprehensive Site Assessment | ☐ Other _____ |
- (specify)
3. Description of property where sampling ~~will be~~/has been conducted:
- ☐ residential ☐ commercial ☐ industrial ☒ school/playground ☒ Other City Streets
- (specify)
4. Description of the sampling locations and types (e.g., soil, groundwater, indoor air, soil gas) to the extent known at the time of this notice.

Semi-Annual Groundwater Sampling

E. Contact information related to the party providing this notice:

Contact Name: Ileen Gladstone, P.E., LSP, LEED AP
Street Address: GEI Consultants, Inc., 400 Unicorn Park Drive
City/Town: Woburn, MA Zip Code: 01801-3341
Telephone: (781) 721-4012 Email: igladstone@geiconsultants.com



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

3 - 23246

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation of a release for which a notification to MassDEP has been made under the Massachusetts Contingency Plan (310 CMR 40.0300) on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at <http://www.mass.gov/eea/agencies/massdep/cleanup>. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See <http://public.dep.state.ma.us/SearchableSites2/Search.aspx> to view site-specific files on-line or <http://mass.gov/eea/agencies/massdep/about/contacts/conduct-a-file-review.html> if you would like to make an appointment to see these files in person. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.



Consulting
Engineers and
Scientists

April 22, 2025
Project 04516-3

Sanctuary Condominium Trust
Charlesgate
867 Boylston Street
Boston, MA 02116

To Whom It May Concern:

**Re: Groundwater Sampling
60 Tufts Street
Somerville, Massachusetts**

Thank you for permitting GEI to conduct groundwater sampling at your property located at 60 Tufts Street in Somerville, Massachusetts. Following groundwater sampling, we are providing you with a "Notice of Environmental Sampling Form (BWSC-123)," as required by the Massachusetts Department of Environmental Protection (MassDEP).

Thank you for your continued assistance. Please contact me at 781-721-4012 or igladstone@geiconsultants.com if you have any questions.

Sincerely,

GEI CONSULTANTS, INC.

A blue ink signature of Ileen S. Gladstone, consisting of a large, stylized 'G' followed by the name.

Ileen S. Gladstone, P.E., LSP, LEED AP
Senior Vice President

A black ink signature of Christopher Coner, written in a cursive style.

Christopher Coner, CHMM
Project Manager

MEF:jam
Enclosure

c: Catherine Malagrida, UniFirst Corporation
MassDEP-NERO (as part of Status Report)



**Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup**

BWSC123

This Notice is Related to:
Release Tracking Number

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

3 - 23246

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: 50 Tufts Street
City/Town: Somerville Zip Code: 02145-4129

B. This notice is being provided to the following party:

1. Name: Director
2. Street Address: Sanctuary Condominium Trust, Charlesgate, 867 Boylston St
City/Town: Boston, MA Zip Code: 02116

C. This notice is being given to inform its recipient (the party listed in Section B):

- ☒ 1. That environmental sampling ~~will be~~/has been conducted at property owned by the recipient of this notice.
☐ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.
☐ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling ~~will be~~/has been conducted:

1. Street Address: 60 Tufts Street
City/Town: Somerville, MA Zip Code: 02145-4110
2. MCP phase of work during which the sampling ~~will be~~/has been conducted:
- | | |
|---|--|
| ☐ Immediate Response Action | ☐ Phase III Feasibility Evaluation |
| ☐ Release Abatement Measure | ☐ Phase IV Remedy Implementation Plan |
| ☐ Utility-related Abatement Measure | ☒ Phase V/Remedy Operation Status |
| ☐ Phase I Initial Site Investigation | ☐ Post-Temporary Solution Operation, Maintenance and Monitoring |
| ☐ Phase II Comprehensive Site Assessment | ☐ Other _____ |
- (specify)
3. Description of property where sampling ~~will be~~/has been conducted:
☒ residential ☐ commercial ☐ industrial ☐ school/playground ☒ Other Condominiums
(specify)
4. Description of the sampling locations and types (e.g., soil, groundwater, indoor air, soil gas) to the extent known at the time of this notice.

Semi-Annual Groundwater Sampling

E. Contact information related to the party providing this notice:

Contact Name: Ileen Gladstone, P.E., LSP, LEED AP
Street Address: GEI Consultants, Inc., 400 Unicorn Park Drive
City/Town: Woburn, MA Zip Code: 01801-3341
Telephone: (781) 721-4012 Email: igladstone@geiconsultants.com



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

3

- 23246

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation of a release for which a notification to MassDEP has been made under the Massachusetts Contingency Plan (310 CMR 40.0300) on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at <http://www.mass.gov/eea/agencies/massdep/cleanup>. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See <http://public.dep.state.ma.us/SearchableSites2/Search.aspx> to view site-specific files on-line or <http://mass.gov/eea/agencies/massdep/about/contacts/conduct-a-file-review.html> if you would like to make an appointment to see these files in person. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.



Consulting
Engineers and
Scientists

April 23, 2025
Project 04516-3

ITS Realty, LLC
87 Baker Street
Belmont, MA 02478

To Whom It May Concern:

**Re: Groundwater Sampling
120 Washington Street
Somerville, Massachusetts**

Thank you for permitting GEI to conduct groundwater sampling at your property located at 120 Washington Street in Somerville, Massachusetts. Following groundwater sampling, we are providing you with a "Notice of Environmental Sampling Form (BWSC-123)," as required by the Massachusetts Department of Environmental Protection (MassDEP).

Thank you for your continued assistance. Please contact me at 781-721-4012 or igladstone@geiconsultants.com if you have any questions.

Sincerely,

GEI CONSULTANTS, INC.

A blue ink signature of Helen S. Gladstone, consisting of a series of loops and a long horizontal stroke.

Helen S. Gladstone, P.E., LSP, LEED AP
Senior Vice President

A blue ink signature of Christopher Coner, featuring a stylized, cursive-like script.

Christopher Coner, CHMM
Project Manager

MEF:jam
Enclosure

c: Catherine Malagrida, UniFirst Corporation
MassDEP-NERO (as part of Status Report)



**Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup**

BWSC123

This Notice is Related to:
Release Tracking Number

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

3 - 23246

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: 50 Tufts Street
City/Town: Somerville Zip Code: 02145-4129

B. This notice is being provided to the following party:

1. Name: ITS Realty LLC
2. Street Address: 87 Baker Street
City/Town: Belmont, MA Zip Code: 02478

C. This notice is being given to inform its recipient (the party listed in Section B):

- ☒ 1. That environmental sampling ~~will be~~/has been conducted at property owned by the recipient of this notice.
☐ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.
☐ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling ~~will be~~/has been conducted:

1. Street Address: 120 Washington Street
City/Town: Somerville, MA Zip Code: 02143
2. MCP phase of work during which the sampling ~~will be~~/has been conducted:
- | | |
|---|--|
| ☐ Immediate Response Action | ☐ Phase III Feasibility Evaluation |
| ☐ Release Abatement Measure | ☐ Phase IV Remedy Implementation Plan |
| ☐ Utility-related Abatement Measure | ☒ Phase V/Remedy Operation Status |
| ☐ Phase I Initial Site Investigation | ☐ Post-Temporary Solution Operation, Maintenance and Monitoring |
| ☐ Phase II Comprehensive Site Assessment | ☐ Other _____ |
- (specify)
3. Description of property where sampling ~~will be~~/has been conducted:
☐ residential ☒ commercial ☐ industrial ☐ school/playground ☒ Other parking lot
(specify)
4. Description of the sampling locations and types (e.g., soil, groundwater, indoor air, soil gas) to the extent known at the time of this notice.

Annual Groundwater Sampling

E. Contact information related to the party providing this notice:

Contact Name: Ileen Gladstone, P.E., LSP, LEED AP
Street Address: GEI Consultants, Inc., 400 Unicorn Park Drive
City/Town: Woburn, MA Zip Code: 01801-3341
Telephone: (781) 721-4012 Email: igladstone@geiconsultants.com



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

3

- 23246

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation of a release for which a notification to MassDEP has been made under the Massachusetts Contingency Plan (310 CMR 40.0300) on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at <http://www.mass.gov/eea/agencies/massdep/cleanup>. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See <http://public.dep.state.ma.us/SearchableSites2/Search.aspx> to view site-specific files on-line or <http://mass.gov/eea/agencies/massdep/about/contacts/conduct-a-file-review.html> if you would like to make an appointment to see these files in person. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

June 25, 2025
Project No. 04516-3

Ms. Kimberly Wells
City Clerk
93 Highland Avenue, 1st Floor
Somerville, MA 02143

**Re: Groundwater Sampling Results
Certain "Public Ways" and Michael E. Capuano Early Childhood Center
Somerville, Massachusetts
MassDEP RTN 3-23246**

Dear Ms. Wells:

On behalf of UniFirst Corporation, GEI Consultants, Inc. is providing results for groundwater samples collected on March 7, March 18, March 19, April 22, April 23, April 24, and April 25, 2025, from groundwater monitoring wells located on municipal property. The sampling was conducted as part of our investigation related to the site at 50 Tufts Street in Somerville, Massachusetts. We:

- Collected groundwater samples from eighteen shallow monitoring wells (GEO-4, GEO-5, GEO-6, MW102, MW103, MW106, MW107, MW108, MW109, MW111R, MW112A, MW115/115R, MW118S, MW119S, MW120S, MW121S, MW122, MW301), two monitoring wells screened in till (MW118T and MW119T), and four monitoring wells screened in bedrock (MW118D, MW120D, MW121D and MW116) on March 7, March 18, March 19, and between April 22 and 25, 2025. We collected a duplicate sample (MW900) from MW116.

Groundwater samples were submitted for chemical testing for volatile organic compounds (VOCs) and one groundwater sample (MW112A) was also tested for manganese and general chemistry compounds including alkalinity, chloride, nitrates, and sulfates. We have attached a summary table of the chemicals detected in the groundwater samples along with the previous sampling results, the laboratory data sheets for the recent sampling, and a figure showing the sampling locations.

Thank you for permitting GEI to conduct groundwater sampling at the Capuano Early Childhood Center, 90 Washington Street, and on certain public ways in Somerville, Massachusetts.

Individuals and public officials may request additional public involvement activities under the Massachusetts Contingency Plan (MCP; 310 CMR 40.1403[10] and 40.1404). The property owner may also request additional documentation, such as that listed at 310 CMR 40.0017(3), associated with the above-referenced samples. We will provide such additional documentation within 30 days of our receipt of such a request.

We appreciate your continued cooperation throughout the sampling process. If you have any immediate questions regarding the water testing results, please do not hesitate to contact me at 781-721-4012 or igladstone@geiconsultants.com.

Sincerely,

GEI CONSULTANTS, INC.

A blue ink signature of Ileen S. Gladstone, consisting of a large, stylized 'G' followed by a horizontal line and a small flourish.

Ileen S. Gladstone, P.E., LSP, LEED AP
Senior Vice President

A black ink signature of Christopher O. Coner, featuring a stylized 'C' and 'O' followed by a horizontal line and a small flourish.

Christopher O. Coner, CHMM
Project Manager

NMT/MEF:jam

Enclosures

cc: Rubén Carmona, Superintendent
Felix Caraballo, Principal
Catherine Malagrida, UniFirst Corporation
MassDEP-NERO (as part of Status Report)



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

3 - 23246

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: 50 Tufts Street
City/Town: Somerville Zip Code: 02145-4129

B. This notice is being provided to the following party:

1. Name: Ms. Kimberly Wells, City of Somerville Clerk
2. Street Address: 93 Highland Avenue, 1st Floor
City/Town: Somerville, MA Zip Code: 02143

C. This notice is being given to inform its recipient (the party listed in Section B):

- ☒ 1. That environmental sampling ~~will be~~/has been conducted at property owned by the recipient of this notice.
- ☒ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.
- ☒ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling ~~will be~~/has been conducted:

1. Street Address: Capuano Center, 90 Washington Street, Somerville City Streets
City/Town: Somerville, MA Zip Code: 02145
2. MCP phase of work during which the sampling ~~will be~~/has been conducted:
- | | |
|---|--|
| ☐ Immediate Response Action | ☐ Phase III Feasibility Evaluation |
| ☐ Release Abatement Measure | ☐ Phase IV Remedy Implementation Plan |
| ☐ Utility-related Abatement Measure | ☒ Phase V/Remedy Operation Status |
| ☐ Phase I Initial Site Investigation | ☐ Post-Temporary Solution Operation, Maintenance and Monitoring |
| ☐ Phase II Comprehensive Site Assessment | ☐ Other _____ |
- (specify)
3. Description of property where sampling ~~will be~~/has been conducted:
- ☐ residential ☐ commercial ☐ industrial ☒ school/playground ☒ Other City Streets
- (specify)
4. Description of the sampling locations and types (e.g., soil, groundwater, indoor air, soil gas) to the extent known at the time of this notice.

Semi-Annual Groundwater Sampling

E. Contact information related to the party providing this notice:

Contact Name: Ileen Gladstone, P.E., LSP, LEED AP
Street Address: GEI Consultants, Inc., 400 Unicorn Park Drive
City/Town: Woburn, MA Zip Code: 01801-3341
Telephone: (781) 721-4012 Email: igladstone@geiconsultants.com



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

3 - 23246

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

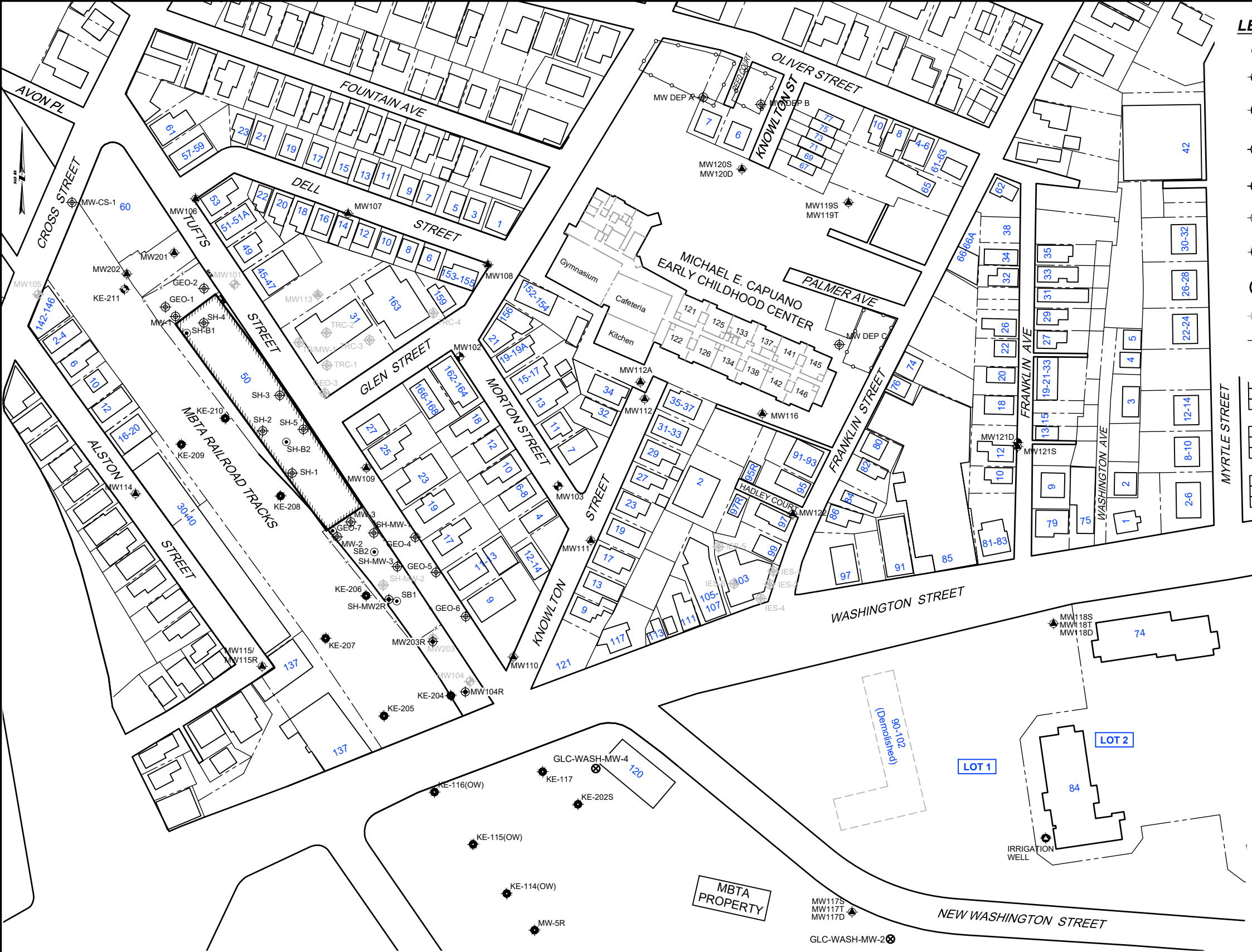
When environmental samples are taken as part of an investigation of a release for which a notification to MassDEP has been made under the Massachusetts Contingency Plan (310 CMR 40.0300) on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at <http://www.mass.gov/eea/agencies/massdep/cleanup>. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See <http://public.dep.state.ma.us/SearchableSites2/Search.aspx> to view site-specific files on-line or <http://mass.gov/eea/agencies/massdep/about/contacts/conduct-a-file-review.html> if you would like to make an appointment to see these files in person. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

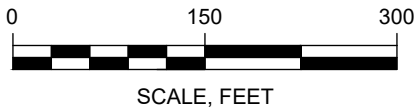


LEGEND:

- MONITORING WELL INSTALLED BY TRC, 2014
- BORING BY KLEINFELDER, MARCH 2014 AND APRIL 2014
- MONITORING WELL BY KLEINFELDER, SEPTEMBER 2012, MARCH 2014, AND APRIL 2014
- MONITORING WELL WITH SOIL VAPOR SAMPLE PORT INSTALLED BY GEI, JANUARY 2007 - JANUARY 2008
- MONITORING WELL INSTALLED BY GEI, MAY 2006
- MONITORING WELL INSTALLED BY OTHERS
- PREVIOUSLY INSTALLED IRRIGATION WELL
- GLXC WELL INSTALLED AUGUST 2020
- WELLS IN GRAY HAVE BEEN DESTROYED OR DECOMMISSIONED
- CHAIN LINK FENCE
- ROOM NUMBER AT CAPUANO SCHOOL
- BOUNDARY OF COMMUNITY GARDENS
- STREET ADDRESS
- MBTA = MASSACHUSETTS BAY TRANSPORTATION AUTHORITY

GENERAL NOTES:

- MONITORING WELL LOCATIONS AND ELEVATIONS, AND CAPUANO CENTER COMMUNITY GARDEN LOCATIONS WERE ESTABLISHED BY ON THE GROUND SURVEYS BY BSC GROUP, INC.
- HORIZONTAL CONTROL FOR THIS PLAN WAS ESTABLISHED BY GPS AND IS BASED ON THE NORTH AMERICAN DATUM OF 1983.
- VERTICAL CONTROL FOR THIS PLAN WAS ESTABLISHED BY GPS AND IS BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988.
- STREET PROPERTY LINES, AND BUILDINGS ARE BASED ON SOMERVILLE ASSESSORS MAPS AND ARE BEST FIT RELATIVE TO THE LOCATION OF THE 50 TUFTS ST. BUILDING.
- GEI OBSERVED ABANDONMENT OF SH-MW1 AND SH-1 THROUGH SH-5 IN 2007.



50 Tufts Street
Somerville, Massachusetts

UniFirst Corporation
Wilmington, Massachusetts



MONITORING WELL
LOCATIONS

Project 04516-3

June 2025

Fig. 1

B:\Private\04516\#Drafting\04516-3\Phase V SRs & RMRs\045163 PhV SR MW Loc (rev 1)

Chemical Testing Results - GEI Groundwater Sampling
50 Tufts Street
Somerville, Massachusetts

Sample Location: Sample Name: Well Screen Interval (ft bgs): Sample Date: Collected By:					GEO-4	GEO-4	GEO-4	GEO-4	GEO4	GEO4	GEO4	GEO-5	GEO-5	GEO-5	GEO-5	GEO5	GEO5	GEO5	GEO-6	GEO-6	GEO-6	GEO-6	GEO-6	GEO6	GEO-6	GEO6	GEO6	GEO6	MW-102	MW102	MW102	MW102	MW102	MW102	MW102	MW102	MW102	MW102
Sample Name: Well Screen Interval (ft bgs): Sample Date: Collected By:					GEO-4	GEO-4	GEO-4	GEO-4	GEO4	GEO4	GEO4	GEO-5	GEO-5	GEO-5	GEO-5	GEO5	GEO5	GEO5	GEO-6	GEO-6	GEO-6	GEO-6	GEO-6	GEO6	GEO-6	GEO6	GEO6	GEO6	MW-102	MW102	MW102	MW102	MW102	MW102	MW102	MW102	MW102	MW102
Sample Name: Well Screen Interval (ft bgs): Sample Date: Collected By:					4 to 19	4 to 19	4 to 19	4 to 19	4 to 19	4 to 19	4 to 19	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	6 to 16	6 to 16	6 to 16	6 to 16	6 to 16	6 to 16	6 to 16	6 to 16	6 to 16	6 to 16	
Sample Name: Well Screen Interval (ft bgs): Sample Date: Collected By:					8/16/04	5/24/06	10/4/06	1/16/07	4/16/07	4/4/24	3/18/25	8/16/04	5/24/06	10/4/06	1/16/07	4/16/07	4/3/24	3/18/25	8/16/04	5/24/06	10/4/06	1/16/07	1/16/07	4/16/07	4/16/07	4/3/24	3/19/25	5/24/06	10/5/06	1/16/07	4/13/07	7/18/07	10/10/07	1/10/08	4/17/08	4/3/24		
Sample Name: Well Screen Interval (ft bgs): Sample Date: Collected By:					Geolnsight	GEI	GEI	GEI	GEI	GEI	GEI	Geolnsight	GEI	GEI	GEI	GEI	GEI	GEI	Geolnsight	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	
Analyte	Method	Units	Method 1 GW-2 Standard	Method 1 GW-3 Standard																																		
Volatile Organic Compounds (VOCs)					8260	µg/l																																
Acetone			50000	50000	< 2000	< 5.0	< 5.0	< 100	< 50	<120	<200	< 2000	< 5.0	< 5.0	< 250	< 5.0	<5.0	<25	< 200	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 5.0	<50	<50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NT	< 10	< 5.0	< 5.0	<5.0	
Benzene			10000	10000	< 100	< 0.50	< 0.50	< 10	< 5.0	<12	<20	< 100	< 0.50	< 0.50	< 25	< 0.50	<0.5	<2.5	< 10	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	<5	<5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NT	< 1.0	< 0.50	< 0.50	<0.5	
Bromodichloromethane			6	50000	< 100	< 1.0	< 1.0	< 20	< 10	<25	<40	< 100	< 1.0	< 1.0	< 50	< 1.0	<1.0	<5.0	< 10	< 1.0	< 0.50	< 0.50	< 1.0	< 2.0	< 1.0	<10	<10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NT	< 2.0	< 1.0	< 1.0	<1.0	
2-Butanone (MEK)			50000	50000	< 1000	< 5.0	< 5.0	< 100	< 50	<120	<200	< 1000	< 5.0	< 5.0	< 250	< 5.0	<5.0	<25	< 100	< 5.0	< 5.0	< 5.0	< 10	< 5.0	<50	<50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NT	< 10	< 5.0	< 5.0	<5		
Carbon disulfide			NS	NS	< 5.0	< 5.0	< 5.0	< 100	< 50	<50	<80	< 5.0	< 5.0	< 5.0	< 250	< 5.0	<2.0	<10	< 5.0	< 5.0	< 0.81 J	< 5.0	< 10	< 5.0	<20	<20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NT	< 10	< 5.0	< 5.0	<2.0		
Carbon tetrachloride			2	5000	< 100	< 1.0	< 1.0	< 20	< 10	<25	<40	< 100	< 1.0	< 1.0	< 50	< 1.0	<1.0	<5.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	<10	<10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0		
Chlorobenzene			200	1000	< 100	< 1.0	< 1.0	< 20	< 10	<25	<40	< 100	< 1.0	< 1.0	< 50	< 1.0	<1.0	<5.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	<10	<10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NT	< 2.0	< 1.0	< 1.0	<1.0	
Chloroethane			NS	NS	< 200	< 2.0	< 2.0	< 40	< 20	<50	<80	< 200	< 2.0	< 2.0	< 100	< 2.0	<2.0	<10	< 20	< 2.0	< 2.0	< 2.0	< 4.0	< 2.0	<20	<20	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	<2.0		
Chloroform			50	20000	< 100	< 1.0	2.5	< 20	< 10	<25	<40	< 100	< 1.0	0.62 J	< 50	< 1.0	<1.0	<5.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	<10	<10	< 1.0	< 1.0	< 1.0	< 1.0	NT	< 2.0	< 1.0	< 1.0	<1.0		
Chloromethane			NS	NS	< 200	< 2.0	< 2.0	< 40	< 20	<50	<80	< 200	< 2.0	< 2.0	< 100	< 2.0	<2.0	<10	< 20	< 2.0	< 2.0	< 2.0	< 4.0	< 2.0	<20	<20	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	NT	< 4.0	< 2.0	< 2.0	<2.0		
1,4-Dichlorobenzene			60	8000	< 100	< 1.0	< 1.0	< 20	< 10	<25	<40	< 100	< 1.0	< 1.0	< 50	< 1.0	<1.0	<5.0	< 10	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	<10	<10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NT	< 2.0	< 1.0	< 1.0	<1.0		
1,1-Dichloroethane			2000	20000	< 100	2.7	7.1	< 20	< 10	<25	<40	< 100	3.0	9.7	< 50	< 1.0	<1.0	<5.0	< 10	2.0	4.4	1.7	1.6	0.92 J	1.1	<10	<10	< 1.0	0.88 J	< 1.0	< 1.0	0.42 J	2.1	4.1	0.51 J	<1.0		
1,2-Dichloroethane			5	20000	< 100	< 1.0	< 1.0	< 20	< 10	<25	<40	< 100	< 1.0	< 1.0	< 50	< 1.0	<1.0	<5.0	< 10	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	<10	<10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0		
1,1-Dichloroethylene			80	30000	< 100	6.1	17.8	< 20	< 10	<25	<40	< 100	8.9	32.7	< 50	< 1.0	<1.0	<5.0	< 10	4.6	11.0	4.4	3.2	2.8	3.8	<10	<10	< 1.0	6.3	50.2	30	< 1.0	23.6	39.7	51.8	22.2 C+		
cis-1,2-Dichloroethylene			20	50000	< 100	6.3	16.7	< 20	5.5 J	<25	<40	< 100	12.5	35.2	< 50	< 1.0	<1.0	<5.0	14.8	9.1	15.4	7.7	6.9	5.3	6.3	<10	<10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0		
trans-1,2-Dichloroethylene			90	50000	< 100	< 1.0	< 1.0	< 20	< 10	<25	<40	< 100	< 1.0	< 1.0	< 50	< 1.0	<1.0	<5.0	< 10	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	<10	<10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0		
1,2-Dichloropropane			3	50000	< 100	< 2.0	< 2.0	< 40	< 20	<25	<40	< 100	< 2.0	< 2.0	< 100	< 2.0	<1.0	<5.0	< 10	< 2.0	< 2.0	< 2.0	< 4.0	< 2.0	<10	<10	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	NT	< 4.0	< 2.0	< 2.0	<1.0		
1,4-Dioxane			5000	50000	NT	< 25	< 25 R	< 5.0	< 250	<6200	<10000	NT	< 25	< 25 R	< 1300	< 25	<250	<1200	NT	< 25	< 25 R	< 25	< 25	< 5.0	< 25	<2500	<2500	< 25	< 25 R	< 25	< 25	< 25	NT	< 50	< 25	< 25	<250	
Ethylbenzene			20000	5000	< 100	< 1.0	< 1.0	< 20	< 10	<25	<40	< 100	< 1.0	< 1.0	< 50	< 1.0	<1.0	<5.0	< 10	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	<10	<10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NT	< 2.0	< 1.0	< 1.0	<1.0		
2-Hexanone			NS	NS	< 1000	< 5.0	< 5.0	< 100	< 50	<120	<200	< 1000	< 5.0	< 5.0	< 250	< 5.0	<5.0	<25	< 100	< 5.0	< 1.0	< 5.0	< 5.0	< 10	< 5.0	<50	<50	< 5.0	< 5.0	< 5.0	< 5.0	NT	< 10	< 5.0	< 5.0	<5.0		
4-Isopropyltoluene			NS	NS	< 100	< 5.0	< 5.0	< 100	< 50	<50	<80	< 100	< 5.0	< 5.0	< 250	< 5.0	<2.0	<10	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	<20	<20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NT	< 10	< 5.0	< 5.0	<2.0		
Methyl tert-butyl ether			50000	50000	< 100	< 1.0	1.5 J+	< 20	< 10	<50	<80	< 100	1.3	3.3 J+	< 50	< 1.0	<2.0	<10	< 10	1.3	1.9 J+	1.2	1.2	0.80 J	0.81 J	<20	<20	< 1.0	4.5 J+	2.7	< 1.0	17.3	24.2	1.7 C+	<2.0			
Methylene chloride			2000	50000	< 1000	< 2.0	< 2.0	< 40	< 20	<50	<80	< 1000	< 2.0	< 2.0	< 100	< 2.0	<2.0	<10	< 100	< 2.0	< 2.0	< 2.0	1.3 J	2.5 J	< 2.0	<20	<20	< 2.0	< 2.0	< 2.0	< 2.0	NT	4.3	< 2.0	< 2.0	<2.0		
Naphthalene			700	20000	< 100	< 5.0	< 5.0	< 100	< 50	<50	<80	< 100	< 5.0	< 5.0	< 250	< 5.0	<2.0	<10	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	<20	<20	< 5.0	< 5.0	< 5.0	< 5.0	NT	< 10	< 5.0	< 5.0	<2.0			
Tert-amyl methyl ether			NS	NS	NT	< 2.0	< 2.0	< 40	< 20	<50	<80	NT	< 2.0	< 2.0	< 100	< 2.0	<2.0	<10	NT	< 2.0	< 2.0	< 2.0	< 4.0	< 2.0	<20	<20	< 2.0	< 2.0	< 2.0	< 2.0	NT	< 4.0	< 2.0	< 2.0	<2.0			
1,1,1,2-Tetrachloroethane			10	50000	< 100	< 5.0	0.84 J	< 100	< 50	<25	<40	< 100	< 5.0	< 5.0	< 250	< 5.0	<1.0	<5.0	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	<10	<10	< 5.0	< 5.0	< 5.0	< 5.0	NT	< 10	< 5.0	< 5.0	<1.0			
Tetrachloroethylene (PCE)			20	30000	12900	6690	24100	16700	8240	3600	6500	14400	2440	12900	254 F+	17.9	100	690	782	675	1980	632	594 F+	618	497	1900	1300	200	898	692	20.3	524	685	606	438 C+			
Tetrahydrofuran			NS	NS	NT	< 10	< 10	< 200	< 100	<50	<80	NT	< 10	< 10	< 500	< 10	<2.0	<1																				

Chemical Testing Results - GEI Groundwater Sampling
50 Tufts Street
Somerville, Massachusetts

[illegible]

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes refer to the laboratory data reports.
2. ft bs = feet below ground surface.
3. µg/l = micrograms per liter.
4. * = The analyte was not detected at a concentration above the specified reporting.
5. SHA = Sanborn Head & Associates.
6. FD = Field Duplicate Sample.
7. NT = Not Tested.
8. * = micrograms CaCO3 per liter

Qualifying Notes:

- B The analyte found in associated method blank.
- C+ The result has a high bias due to surrogate recovery above upper control limits.
- E The value exceeds the calibration range.
- F+ The result has a high bias due to matrix spike recovery above upper control limits.
- F- The result has a low bias due to matrix spike recovery below lower control limits.
- G The result is estimated due to duplicate precision outside control limits.
- J The reported result is below the laboratory reporting limit and is estimated.
- K- The reported result is estimated.
- K- The result has a low bias due to blank spike or laboratory control sample recovery below lower control limits.
- K+ The result has a high bias due to blank spike or laboratory control sample recovery above upper control limits.
- R The result is rejected due to gross exceedence of minimum response factor criteria.

Chemical Testing Results - GEI Groundwater Sampling
50 Tufts Street
Somerville, Massachusetts

[illegible]

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1. Analytes detected in at least one sample are reported here. For a complete list of analytes refer to the laboratory data reports.
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8. * = micrograms CaCO3 per liter

Qualifying Notes:

- B The analyte found in associated method blank.
- C+ The result has a high bias due to surrogate recovery above upper control limits.
- E The value exceeds the calibration range.
- F+ The result has a high bias due to matrix spike recovery above upper control limits.
- F- The result has a low bias due to matrix spike recovery below lower control limits.
- G The result is estimated due to duplicate precision outside control limits.
- J The reported result is below the laboratory reporting limit and is estimated.
- J+ The reported result is estimated.
- K- The result has a low bias due to blank spike or laboratory control sample recovery below lower control limits.
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Chemical Testing Results - GEI Groundwater Sampling
50 Tufts Street
Somerville, Massachusetts

Sample Location: Sample Name: Well Screen Interval (ft bgs): Sample Date: Collected By:					MW112A	MW112A	MW112A	MW112A	MW112A	MW112A	MW112A	MW112A	MW112A	MW112A	MW112A	MW112A	MW112A	MW112A	MW112A	MW112A	MW112A	MW112A	MW112A	MW112A	MW112A	MW112A	MW112A	MW112A	MW112A	MW112A	MW112A		
					4 to 19	4 to 19	4 to 19	4 to 19	4 to 19	4 to 19	4 to 19	4 to 19	4 to 19	4 to 19	4 to 19	4 to 19	4 to 19	4 to 19	4 to 19	4 to 19	4 to 19	4 to 19	4 to 19	4 to 19	4 to 19	4 to 19	4 to 19	4 to 19	4 to 19	4 to 19	4 to 19		
					11/16/11	4/16/12	4/16/12	11/12/12	4/24/13	4/24/13	11/18/13	6/11/14	11/18/14	4/17/15	4/17/15	4/28/16	11/21/16	4/18/17	4/18/2017	11/10/2017	4/4/2018	4 to 19	4 to 19	4 to 19	4 to 19	4 to 19	4 to 19	4 to 19	4 to 19	4 to 19	4 to 19		
					GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI		
Analyte	Method	Units	Method 1 GW-3 Standard	Method 1 GW-3 Standard																													
Volatile Organic Compounds (VOCs)					8260	µg/l																											
Acetone			50000	50000	< 5.0	< 5.0 K-	< 5.0 K-	< 10 K-	< 20	< 20	< 10 K-	< 10 K-	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 20	<25	<25	<25	<25	<10	<25	<25	<25	<25	<25	<10	< 25	<12
Benzene			1000	10000	< 0.50	< 0.50	< 0.50	< 1.0	< 1.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.43 J	0.23 J	< 1.0	<1.3	<1.3	<1.3	<0.50	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<1	< 2.5	<1.2	
Bromodichloromethane			6	50000	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	<2.5	<2.5	<2.5	<1.0	<5.0	<5.0	<5.0	<5.0	<5	< 2	< 5.0	<2.5	
2-Butanone (MEK)			50000	50000	< 5.0	< 5.0	< 5.0	< 10 K-	< 10	< 10	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	<10	<10	< 20	<25	<25	<25	<10	<25	<25	<25	<25	<25	<5	< 25	<12	
Carbon disulfide			NS	NS	< 5.0	< 5.0	< 5.0	< 10	< 10	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0	<4.0	<5.0	<5.0	<2.0	<10	<10	<10	<10	<10	<10	<2	< 10	<5.0	
Carbon tetrachloride			2	5000	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	<2.5	<2.5	<2.5	<1.0	<5.0	<5.0	<5.0	<5.0	<5	<1	< 5.0	<2.5	
Chlorobenzene			200	1000	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	<2.5	<2.5	<2.5	<1.0	<5.0	<5.0	<5.0	<5.0	<5	<2	< 5.0	<2.5	
Chloroethane			NS	NS	< 2.0	< 2.0	< 2.0	< 4.0	< 4.0	< 4.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	<2.5	<2.5	<2.5	<1.0	<10	<10	<10	<10	<10	<4	< 10	<5.0	
Chloroform			50	20000	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	<2.5	<2.5	<2.5	<1.0	<5.0	<5.0	<5.0	<5.0	<5	<2	< 5.0	<2.5	
Chloromethane			NS	NS	< 2.0	< 2.0	< 2.0	< 4.0	< 4.0	< 4.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	<2.5	<2.5	<2.5	<1.0	<10	<10	<10	<10	<10	<4	< 10	<5.0	
1,4-Dichlorobenzene			60	8000	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	<2.5	<2.5	<2.5	<1.0	<5.0	<5.0	<5.0	<5.0	<5	<2	< 5.0	<2.5	
1,1-Dichloroethane			2000	20000	39.5	71.5	69.0	48.1	24.2	37.0	73.5	18.3	64.1 G K-	23.2	25.2	14.1	77	34.1	30.1	88.1	25.3	25.3	38.5	36.9	51	48	40	35	24	35	50	39	28
1,2-Dichloroethane			5	20000	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	<2.5	<2.5	<2.5	<1.0	<5.0	<5.0	<5.0	<5.0	<5	<2	< 5.0	<2.5	
1,1-Dichloroethylene			80	30000	47.6	86.4	76.2	57.3	30.2	30.0	86.5	38.5	109 K+	39	42.9	21.5	132	47.7	43.0	92.5	33.0	33.0	57.3	63.1	79	98	58	63	45	67	27	53	46
cis-1,2-Dichloroethylene			20	50000	169	178	185	150	145	112	209	150	321	71.1	84.1	108	230	78.2	71.8	155	98.5	98.5	60.6	131.0	72	130	62	123	85	68	100	64	100
trans-1,2-Dichloroethylene			90	50000	< 1.0	< 1.0	< 1.0	< 2.0	2.9	< 1.0	< 1.0	< 1.0	< 1.0 K+	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	<2.5	<2.5	<2.5	<1.0	<5.0	<5.0	<5.0	<5.0	<5	<2	< 5.0	<2.5	
1,2-Dichloropropane			3	50000	< 2.0	< 2.0	< 2.0	< 4.0	< 4.0	< 4.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 2.0	<2.5	<2.5	<2.5	<1.0	<5.0	<5.0	<5.0	<5.0	<5	<2	< 5.0	<2.5	
1,4-Dioxane			5000	50000	< 25	< 25	< 25	< 50	< 50	< 50	< 25	< 25	< 25	< 25	< 25	< 25	< 50	<130	<130	<250	<310	<310	<310	<130	<1200	<1200	<1200	<1200	<1200	<1200	<1200	<620	<620
Ethylbenzene			20000	5000	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	<2.5	<2.5	<2.5	<1.0	<5.0	<5.0	<5.0	<5.0	<5	<2	< 5.0	<2.5	
2-Hexanone			NS	NS	< 5.0	< 5.0	< 5.0	< 10	< 10	< 10	< 5.0 K-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	<5.0	<5.0	<10	<13	<13	<13	<5.0	<25	<25	<25	<10	<25	<12
4-Isopropyltoluene			NS	NS	< 5.0	< 5.0	< 5.0	< 10	< 10	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0	< 4.0	<5.0	<5.0	<5.0	<2.0	<10	<10	<10	<10	<10	<4	< 10	<5.0		
Methyl tert-butyl ether			50000	50000	22.3	27.1	26.2	28.8	19.0	14.1	64.6	4.6	47.3 K+	11.9	13.9	3.9	53.9	11.6	11.4	56	19.1	19.1	25.9	21.7	27	30	19	12	5	13	10	15	6
Methylene chloride			2000	50000	< 2.0	< 2.0	< 2.0	< 4.0	< 4.0	< 4.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	<2.5	<2.5	<2.5	<1.0	<10	<10	<10	<10	<10	<4	< 10	<5.0	
Naphthalene			700	20000	< 5.0	< 5.0	< 5.0	< 10	< 10	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	<13	<13	<13	<5.0	<10	<10	<10	<10	<10	<4	< 10	<5.0	
Tert-amyl methyl ether			NS	NS	< 2.0	< 2.0	< 2.0	< 4.0	< 4.0	< 4.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	<2.5	<2.5	<2.5	<1.0	<10	<10	<10	<10	<10	<4	< 10	<5.0	
1,1,1,2-Tetrachloroethane			10	50000	< 5.0	< 5.0	< 5.0	< 10	< 10	< 10	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	<2.5	<2.5	<2.5	<1.0	<5.0	<5.0	<5.0	<5.0	<5	<2	< 5.0	<2.5	
Tetrachloroethylene (PCE)			20	30000	363	569 R	604	546	339	581	371	266	398	303	300	258	508	435	404	908	317	317	555	463	750	760	630	460	370	560	300	460	370
Tetrahydrofuran			NS	NS	< 10	< 10	< 10	< 20 F- K-	< 20	< 20	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 20	<25	<25	<25	<10	<10	<10	<10	<10	<10	<4	< 10	<5.0	
Toluene			40000	40000	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	<2.5	<2.5	<2.5	<1.0	<5.0	<5.0	<5.0	<5.0	<5	<2	< 5.0	<2.5	
1,1,1-Trichloroethane (TCA)			5000	20000	3.3	5.3	4.8	4.1	4.3	6.5	8.0	1.5	3.6	1.3	1.4	1.7	6.5	4.1	3.6	11.4	3.6	3.6	5.4	5.0	7.5	7.8	7.0	5.1	3.0	<5	4.1	5.4	3.5
1,1,2-Trichloroethane			900	50000	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	<2.5	<2.5	<2.5	<1.0	<5.0	<5.0	<5.0	<5.0	<5	<2	< 5.0	<2.5	
Trichloroethylene (TCE)			5	5000	95.0	171	157	138	87.0	140	146	82.0	117	71	73	61.3	220.0	118.0	107	247	92.3	92.3	136	136	180	190	140	130	95	140	170	110	84
Vinyl chloride			2	50000	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	4.4	0.90 J	< 1.0	0.77 J G K-	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	<2.5	<2.5	<2.5	1.4	<5.0	<5.0	<5.0	<5.0	<5	<2	11	12	
m,p-Xylene			3000	5000	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	<2.5	<2.5	<2.5	<1.0	<10	<10	<10	<10	<4	< 10	<5.0	<5.0	
o-Xylene			3000	5000	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	<																			

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Chemical Testing Results - GEI Groundwater Sampling
50 Tufts Street
Somerville, Massachusetts

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Sample Location: MW120S					MW120S	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	
Sample Name: MW120S					MW120S	MW121D	MW121D	MW121D	MW121D	MW901	MW121D	MW900 (FD)	MW121D	MW901 (FD)	MW121D	MW900 (FD)	MW121D	MW900 (FD)	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	
Well Screen Interval (ft bgs): 5 to 20					32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1		
Sample Date: 4/22/25					10/22/07	11/15/08	4/17/08	7/14/08	7/14/08	10/22/08	10/22/08	10/22/08	11/12/09	4/13/09	4/13/09	4/13/09	7/14/09	7/14/09	7/14/09	7/14/09	4/12/10	4/20/11	4/16/12	11/12/12	4/23/13	11/18/13	4/30/14	11/18/14	
Collected By: GEI					GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	
Analyte	Method	Units	Method 1 GW-2 Standard	Method 1 GW-3 Standard																									
Volatile Organic Compounds (VOCs)					8260	µg/l																							
Acetone			50000	50000	<5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0 F+	< 5.0	< 5.0	< 5.0 J+	< 5.0	<5.0 K-	< 5.0 K-	< 10	< 10 K-	< 10	< 10	< 10		
Benzene			1000	10000	<0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50		
Bromodichloromethane			6	50000	<1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0		
2-Butanone (MEK)			50000	50000	<5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0 K-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0		
Carbon disulfide			NS	NS	<2.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0		
Carbon tetrachloride			2	5000	<1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0		
Chlorobenzene			200	1000	<1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0		
Chloroethane			NS	NS	<2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0		
Chloroform			50	20000	<1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0		
Chloromethane			NS	NS	<2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0		
1,4-Dichlorobenzene			60	8000	<1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0		
1,1-Dichloroethane			2000	20000	<1.0	46.3	55.3	46.6	37.2	38.1	36.1	34.2	38.2	38.3	37.2	38.1	37.6	37.9	54.8	52.9	65.8	67.7	49.9	63.4	32.1	45.0	149.0	55.7	35.9
1,2-Dichloroethane			5	20000	<1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0		
1,1-Dichloroethylene			80	30000	<1.0	13.2	< 1.0	16.7	12.8	12.6	12.9 G	8.4 G	14.0	14.2	14.1	14.2	11.0	10.4	21.8	18.0	24.1	25.5	17.6	22.3	12.7	17.6	59.7 K+	23.5	14.5
cis-1,2-Dichloroethylene			20	50000	<1.0	3.9	11.8	6.4	21.8	22.6	83.7 G	41.2 G	134	138	80.0	78.4	105	106	253	279	217	178	122	193	67.2	133	316	186	73.6
trans-1,2-Dichloroethylene			90	50000	<1.0	< 1.0	0.70 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	5.8	< 1.0	< 1.0	2.9	< 1.0	1.5	0.57 J K+	<1.0	<1.0
1,2-Dichloropropane			3	50000	<1.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	
1,4-Dioxane			5000	50000	<250	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	
Ethylbenzene			20000	5000	<1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
2-Hexanone			NS	NS	<5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	
4-Isopropyltoluene			NS	NS	<2.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	
Methyl tert-butyl ether			50000	50000	<2.0	3.0	3.8	2.4	2.1	2.0	5.6	5.6	1.8	1.8	1.7	1.9	1.4	1.4	< 1.0	0.94 J	2.0	1.7	2.1	8.6 K-	2.7	2.3	7.1 K+	2.1	1.6
Methylene chloride			2000	50000	<2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	
Naphthalene			700	20000	<2.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	
Tert-amyl methyl ether			NS	NS	<2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	
1,1,1,2-Tetrachloroethane			10	50000	<1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	
Tetrachloroethylene (PCE)			20	30000	<1.0	182	258	177	157	154	148 G	97.7 G	112	114	121	118	140	139	115	119	219	356	223	276	124	163	224	216	216
Tetrahydrofuran			NS	NS	<2.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	
Toluene			50000	40000	<1.0	0.51 J	1.6	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
1																													

Chemical Testing Results - GEI Groundwater Sampling
50 Tufts Street
Somerville, Massachusetts

Sample Location:					MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121S	MW121S	MW121S	MW121S	MW121S	MW121S	MW121S	MW121S
Sample Name:					MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121D	MW121S	MW121S	MW121S	MW121S	MW121S	MW121S	MW121S	MW121S
Well Screen Interval (ft bgs):					32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	
Sample Date:					4/28/16	11/21/16	4/17/17	11/8/17	4/3/18	11/15/18	4/15/19	11/22/19	4/16/20	11/18/20	4/13/21	11/30/21	4/13/22	11/29/22	4/18/23	11/7/23	4/3/24	11/14/24	4/23/25	10/22/07	1/15/08	4/17/08	7/14/08	10/22/08	1/15/09	4/13/09	7/14/09
Collected By:					GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI
Analyte	Method	Units	Method 1 GW-2 Standard	Method 1 GW-3 Standard																											
Volatile Organic Compounds (VOCs)					8260	µg/l																									
Acetone			50000	50000	8.7 J	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	
Benzene			1000	10000	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	
Bromodichloromethane			6	50000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
2-Butanone (MEK)			50000	50000	< 5.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	
Carbon disulfide			NS	NS	< 5.0	< 5.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	
Carbon tetrachloride			2	5000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Chlorobenzene			200	1000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Chloroethane			NS	NS	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	
Chloroform			50	20000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Chloromethane			NS	NS	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	
1,4-Dichlorobenzene			60	8000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
1,1-Dichloroethane			2000	20000	40.2	109.0	32.0	47.6	14.8	14.0	18.8	18.0	16	12	18	18	18	38	24	25	2.1	19	8.4	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
1,2-Dichloroethane			5	20000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
1,1-Dichloroethylene			80	30000	14.9	35.9	14.8	15.3	7.6	7.0	7.7	8.7	8.6	8.0	7.5	6.3	2.3	7.3	5.5	5.7	< 1.0	4.1	1.4	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
cis-1,2-Dichloroethylene			20	50000	108	271	79.9	119	24.8	44.3	73.5	85.4	20	26	37	18	33	11	17	16	2.8	8.4	9	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
trans-1,2-Dichloroethylene			90	50000	< 1.0	1.1	0.37 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
1,2-Dichloropropane			3	50000	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	
1,4-Dioxane			5000	50000	< 25	< 50	< 130	< 130	< 130	< 130	< 130	< 250	< 250	< 250	< 250	< 250	< 250	< 250	< 250	< 250	< 250	< 250	< 250	< 250	< 250	< 250	< 250	< 250	< 250	< 250	
Ethylbenzene			20000	5000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
2-Hexanone			NS	NS	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	
4-Isopropyltoluene			NS	NS	< 5.0	< 5.0	< 2.0	< 1.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	
Methyl tert-butyl ether			50000	50000	0.72 J	1.7	1.4	1.4	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Methylene chloride			2000	50000	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	
Naphthalene			700	20000	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 5.0	5.2	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	
Tert-amyl methyl ether			NS	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	
1,1,1,2-Tetrachloroethane			10	50000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	
Tetrachloroethylene (PCE)			20	30000	227	139	160	242	78	47.5	48.2	64.8	87	58	72	52	1.9	54	35	35	< 1.0	26	1.6	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Tetrahydrofuran			NS	NS	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	
Toluene			50000	40000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
1,1,1-Trichloroethane (TCA)			4000	20000	1.1	< 1.0	0.45 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
1,1,2-Trichloroethane			900	50000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Trichloroethylene (TCE)			5	5000	262	176	159	310	39.7	23.5	31.1	40.0	34	22	40	27	5	32.0	20.0	23	< 1.0	14	4.5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Vinyl chloride			2	50000	18.2	23.3	6.6	10.4	< 1.0	6.1	9	4.5	< 1.0	2.0	1.5	1.0	31.0	3.0	8.6	3.2	2.0	1.7	2.8	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
m,p-Xylene			3000	5000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	<								

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes refer to the laboratory data reports.
2. ft lbs = feet below ground surface.
3. µg/l = micrograms per liter.
4. * = The analyte was not detected at a concentration above the specified reporting.
5. SHA = Sanborn Head & Associates.
6. FDA = Field Duplicate Sample.
7. NT = Not Tested.
8. * = micrograms CaCO3 per liter

Qualifying Notes:

- B The analyte found in associated method blank.
- C+ The result has a high bias due to surrogate recovery above upper control limits.
- E The value exceeds the calibration range.
- F+ The result has a high bias due to matrix spike recovery above upper control limits.
- F- The result has a low bias due to matrix spike recovery below lower control limits.
- G The result is estimated due to duplicate precision outside control limits.
- J The reported result is below the laboratory reporting limit and is estimated.
- J+ The reported result is estimated.
- K- The result has a low bias due to blank spike or laboratory control sample recovery below lower control limits.
- K+ The result has a high bias due to blank spike or laboratory control sample recovery above upper control limits.
- R The result is rejected due to gross exceedence of minimum response factor criteria.

Chemical Testing Results - GEI Groundwater Sampling
50 Tufts Street
Somerville, Massachusetts

[illegible]

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes refer to the laboratory data reports.
2. ft bs = feet below ground surface.
3. µg/l = micrograms per liter.
4. * = The analyte was not detected at a concentration above the specified reporting.
5. SHA = Sanborn Head & Associates.
6. FD = Field Duplicate Sample.
7. NT = Not Tested.
8. * = micrograms CaCO3 per liter

Qualifying Notes:

- B The analyte found in associated method blank.
- C+ The result has a high bias due to surrogate recovery above upper control limits.
- E The value exceeds the calibration range.
- F+ The result has a high bias due to matrix spike recovery above upper control limits.
- F- The result has a low bias due to matrix spike recovery below lower control limits.
- G The result is estimated due to duplicate precision outside control limits.
- J The reported result is below the laboratory reporting limit and is estimated.
- J+ The reported result is estimated.
- K- The result has a low bias due to blank spike or laboratory control sample recovery below lower control limits.
- K+ The result has a high bias due to blank spike or laboratory control sample recovery above upper control limits.
- R The result is rejected due to gross exceedence of minimum response factor criteria.

Chemical Testing Results - GEI Groundwater Sampling
50 Tufts Street
Somerville, Massachusetts

[illegible]

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes refer to the laboratory data reports.
2. ft lbs = feet below ground surface.
3. µg/l = micrograms per liter.
4. * = The analyte was not detected at a concentration above the specified reporting.
5. SHA = Sanborn Head & Associates.
6. FDA = Field Duplicate Sample.
7. NT = Not Tested.
8. * = micrograms CaCO3 per liter

Qualifying Notes:

- B The analyte found in associated method blank.
- C+ The result has a high bias due to surrogate recovery above upper control limits.
- E The value exceeds the calibration range.
- F+ The result has a high bias due to matrix spike recovery above upper control limits.
- F- The result has a low bias due to matrix spike recovery below lower control limits.
- G The result is estimated due to duplicate precision outside control limits.
- J The reported result is below the laboratory reporting limit and is estimated.
- K- The reported result is estimated.
- K- The result has a low bias due to blank spike or laboratory control sample recovery below lower control limits.
- K+ The result has a high bias due to blank spike or laboratory control sample recovery above upper control limits.
- R The result is rejected due to gross exceedence of minimum response factor criteria.

Project Name: TUFTS STREET**Lab Number:** L2516183**Project Number:** 045163**Report Date:** 03/27/25**SAMPLE RESULTS**

Lab ID: L2516183-01 D

Date Collected: 03/18/25 13:00

Client ID: 045163-GEO-4

Date Received: 03/20/25

Sample Location: SOMERVILLE, MA

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Analytical Method: 141,8260D

Analytical Date: 03/26/25 13:17

Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	80	--	40
1,1-Dichloroethane	ND		ug/l	40	--	40
Chloroform	ND		ug/l	40	--	40
Carbon tetrachloride	ND		ug/l	40	--	40
1,2-Dichloropropane	ND		ug/l	40	--	40
Dibromochloromethane	ND		ug/l	40	--	40
1,1,2-Trichloroethane	ND		ug/l	40	--	40
Tetrachloroethene	6500		ug/l	40	--	40
Chlorobenzene	ND		ug/l	40	--	40
Trichlorofluoromethane	ND		ug/l	80	--	40
1,2-Dichloroethane	ND		ug/l	40	--	40
1,1,1-Trichloroethane	ND		ug/l	40	--	40
Bromodichloromethane	ND		ug/l	40	--	40
trans-1,3-Dichloropropene	ND		ug/l	16	--	40
cis-1,3-Dichloropropene	ND		ug/l	16	--	40
1,3-Dichloropropene, Total	ND		ug/l	16	--	40
1,1-Dichloropropene	ND		ug/l	80	--	40
Bromoform	ND		ug/l	80	--	40
1,1,2,2-Tetrachloroethane	ND		ug/l	40	--	40
Benzene	ND		ug/l	20	--	40
Toluene	ND		ug/l	40	--	40
Ethylbenzene	ND		ug/l	40	--	40
Chloromethane	ND		ug/l	80	--	40
Bromomethane	ND		ug/l	80	--	40
Vinyl chloride	ND		ug/l	40	--	40
Chloroethane	ND		ug/l	80	--	40
1,1-Dichloroethene	ND		ug/l	40	--	40
trans-1,2-Dichloroethene	ND		ug/l	40	--	40



Project Name: TUFTS STREET**Lab Number:** L2516183**Project Number:** 045163**Report Date:** 03/27/25**SAMPLE RESULTS**

Lab ID: L2516183-01 D

Date Collected: 03/18/25 13:00

Client ID: 045163-GEO-4

Date Received: 03/20/25

Sample Location: SOMERVILLE, MA

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	47		ug/l	40	--	40
1,2-Dichlorobenzene	ND		ug/l	40	--	40
1,3-Dichlorobenzene	ND		ug/l	40	--	40
1,4-Dichlorobenzene	ND		ug/l	40	--	40
Methyl tert butyl ether	ND		ug/l	80	--	40
p/m-Xylene	ND		ug/l	80	--	40
o-Xylene	ND		ug/l	40	--	40
Xylenes, Total	ND		ug/l	40	--	40
cis-1,2-Dichloroethene	ND		ug/l	40	--	40
1,2-Dichloroethene, Total	ND		ug/l	40	--	40
Dibromomethane	ND		ug/l	80	--	40
1,2,3-Trichloropropane	ND		ug/l	80	--	40
Styrene	ND		ug/l	40	--	40
Dichlorodifluoromethane	ND		ug/l	80	--	40
Acetone	ND		ug/l	200	--	40
Carbon disulfide	ND		ug/l	80	--	40
Methyl ethyl ketone	ND		ug/l	200	--	40
Methyl isobutyl ketone	ND		ug/l	200	--	40
2-Hexanone	ND		ug/l	200	--	40
Bromochloromethane	ND		ug/l	80	--	40
Tetrahydrofuran	ND		ug/l	80	--	40
2,2-Dichloropropane	ND		ug/l	80	--	40
1,2-Dibromoethane	ND		ug/l	80	--	40
1,3-Dichloropropane	ND		ug/l	80	--	40
1,1,1,2-Tetrachloroethane	ND		ug/l	40	--	40
Bromobenzene	ND		ug/l	80	--	40
n-Butylbenzene	ND		ug/l	80	--	40
sec-Butylbenzene	ND		ug/l	80	--	40
tert-Butylbenzene	ND		ug/l	80	--	40
o-Chlorotoluene	ND		ug/l	80	--	40
p-Chlorotoluene	ND		ug/l	80	--	40
1,2-Dibromo-3-chloropropane	ND		ug/l	80	--	40
Hexachlorobutadiene	ND		ug/l	24	--	40
Isopropylbenzene	ND		ug/l	80	--	40
p-Isopropyltoluene	ND		ug/l	80	--	40
Naphthalene	ND		ug/l	80	--	40
n-Propylbenzene	ND		ug/l	80	--	40



Project Name: TUFTS STREET**Lab Number:** L2516183**Project Number:** 045163**Report Date:** 03/27/25**SAMPLE RESULTS**

Lab ID: L2516183-01 D

Date Collected: 03/18/25 13:00

Client ID: 045163-GEO-4

Date Received: 03/20/25

Sample Location: SOMERVILLE, MA

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	80	--	40
1,2,4-Trichlorobenzene	ND		ug/l	80	--	40
1,3,5-Trimethylbenzene	ND		ug/l	80	--	40
1,2,4-Trimethylbenzene	ND		ug/l	80	--	40
Diethyl ether	ND		ug/l	80	--	40
Diisopropyl Ether	ND		ug/l	80	--	40
Ethyl-Tert-Butyl-Ether	ND		ug/l	80	--	40
Tertiary-Amyl Methyl Ether	ND		ug/l	80	--	40
1,4-Dioxane	ND		ug/l	10000	--	40

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	105		70-130

Project Name: TUFTS STREET**Lab Number:** L2516183**Project Number:** 045163**Report Date:** 03/27/25**SAMPLE RESULTS**

Lab ID: L2516183-02 D

Date Collected: 03/18/25 14:45

Client ID: 045163-GEO-5

Date Received: 03/20/25

Sample Location: SOMERVILLE, MA

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Analytical Method: 141,8260D

Analytical Date: 03/26/25 12:51

Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	10	--	5
1,1-Dichloroethane	ND		ug/l	5.0	--	5
Chloroform	ND		ug/l	5.0	--	5
Carbon tetrachloride	ND		ug/l	5.0	--	5
1,2-Dichloropropane	ND		ug/l	5.0	--	5
Dibromochloromethane	ND		ug/l	5.0	--	5
1,1,2-Trichloroethane	ND		ug/l	5.0	--	5
Tetrachloroethene	690		ug/l	5.0	--	5
Chlorobenzene	ND		ug/l	5.0	--	5
Trichlorofluoromethane	ND		ug/l	10	--	5
1,2-Dichloroethane	ND		ug/l	5.0	--	5
1,1,1-Trichloroethane	ND		ug/l	5.0	--	5
Bromodichloromethane	ND		ug/l	5.0	--	5
trans-1,3-Dichloropropene	ND		ug/l	2.0	--	5
cis-1,3-Dichloropropene	ND		ug/l	2.0	--	5
1,3-Dichloropropene, Total	ND		ug/l	2.0	--	5
1,1-Dichloropropene	ND		ug/l	10	--	5
Bromoform	ND		ug/l	10	--	5
1,1,2,2-Tetrachloroethane	ND		ug/l	5.0	--	5
Benzene	ND		ug/l	2.5	--	5
Toluene	ND		ug/l	5.0	--	5
Ethylbenzene	ND		ug/l	5.0	--	5
Chloromethane	ND		ug/l	10	--	5
Bromomethane	ND		ug/l	10	--	5
Vinyl chloride	ND		ug/l	5.0	--	5
Chloroethane	ND		ug/l	10	--	5
1,1-Dichloroethene	ND		ug/l	5.0	--	5
trans-1,2-Dichloroethene	ND		ug/l	5.0	--	5



Project Name: TUFTS STREET**Lab Number:** L2516183**Project Number:** 045163**Report Date:** 03/27/25**SAMPLE RESULTS**

Lab ID: L2516183-02 D

Date Collected: 03/18/25 14:45

Client ID: 045163-GEO-5

Date Received: 03/20/25

Sample Location: SOMERVILLE, MA

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	10		ug/l	5.0	--	5
1,2-Dichlorobenzene	ND		ug/l	5.0	--	5
1,3-Dichlorobenzene	ND		ug/l	5.0	--	5
1,4-Dichlorobenzene	ND		ug/l	5.0	--	5
Methyl tert butyl ether	ND		ug/l	10	--	5
p/m-Xylene	ND		ug/l	10	--	5
o-Xylene	ND		ug/l	5.0	--	5
Xylenes, Total	ND		ug/l	5.0	--	5
cis-1,2-Dichloroethene	ND		ug/l	5.0	--	5
1,2-Dichloroethene, Total	ND		ug/l	5.0	--	5
Dibromomethane	ND		ug/l	10	--	5
1,2,3-Trichloropropane	ND		ug/l	10	--	5
Styrene	ND		ug/l	5.0	--	5
Dichlorodifluoromethane	ND		ug/l	10	--	5
Acetone	ND		ug/l	25	--	5
Carbon disulfide	ND		ug/l	10	--	5
Methyl ethyl ketone	ND		ug/l	25	--	5
Methyl isobutyl ketone	ND		ug/l	25	--	5
2-Hexanone	ND		ug/l	25	--	5
Bromochloromethane	ND		ug/l	10	--	5
Tetrahydrofuran	ND		ug/l	10	--	5
2,2-Dichloropropane	ND		ug/l	10	--	5
1,2-Dibromoethane	ND		ug/l	10	--	5
1,3-Dichloropropane	ND		ug/l	10	--	5
1,1,1,2-Tetrachloroethane	ND		ug/l	5.0	--	5
Bromobenzene	ND		ug/l	10	--	5
n-Butylbenzene	ND		ug/l	10	--	5
sec-Butylbenzene	ND		ug/l	10	--	5
tert-Butylbenzene	ND		ug/l	10	--	5
o-Chlorotoluene	ND		ug/l	10	--	5
p-Chlorotoluene	ND		ug/l	10	--	5
1,2-Dibromo-3-chloropropane	ND		ug/l	10	--	5
Hexachlorobutadiene	ND		ug/l	3.0	--	5
Isopropylbenzene	ND		ug/l	10	--	5
p-Isopropyltoluene	ND		ug/l	10	--	5
Naphthalene	ND		ug/l	10	--	5
n-Propylbenzene	ND		ug/l	10	--	5



Project Name: TUFTS STREET**Lab Number:** L2516183**Project Number:** 045163**Report Date:** 03/27/25**SAMPLE RESULTS**

Lab ID: L2516183-02 D

Date Collected: 03/18/25 14:45

Client ID: 045163-GEO-5

Date Received: 03/20/25

Sample Location: SOMERVILLE, MA

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	10	--	5
1,2,4-Trichlorobenzene	ND		ug/l	10	--	5
1,3,5-Trimethylbenzene	ND		ug/l	10	--	5
1,2,4-Trimethylbenzene	ND		ug/l	10	--	5
Diethyl ether	ND		ug/l	10	--	5
Diisopropyl Ether	ND		ug/l	10	--	5
Ethyl-Tert-Butyl-Ether	ND		ug/l	10	--	5
Tertiary-Amyl Methyl Ether	ND		ug/l	10	--	5
1,4-Dioxane	ND		ug/l	1200	--	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	105		70-130

Project Name: TUFTS STREET**Lab Number:** L2516183**Project Number:** 045163**Report Date:** 03/27/25**SAMPLE RESULTS**

Lab ID: L2516183-03 D

Date Collected: 03/19/25 10:25

Client ID: 045163-GEO-6

Date Received: 03/20/25

Sample Location: SOMERVILLE, MA

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Analytical Method: 141,8260D

Analytical Date: 03/27/25 08:06

Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	20	--	10
1,1-Dichloroethane	ND		ug/l	10	--	10
Chloroform	ND		ug/l	10	--	10
Carbon tetrachloride	ND		ug/l	10	--	10
1,2-Dichloropropane	ND		ug/l	10	--	10
Dibromochloromethane	ND		ug/l	10	--	10
1,1,2-Trichloroethane	ND		ug/l	10	--	10
Tetrachloroethene	1300		ug/l	10	--	10
Chlorobenzene	ND		ug/l	10	--	10
Trichlorofluoromethane	ND		ug/l	20	--	10
1,2-Dichloroethane	ND		ug/l	10	--	10
1,1,1-Trichloroethane	ND		ug/l	10	--	10
Bromodichloromethane	ND		ug/l	10	--	10
trans-1,3-Dichloropropene	ND		ug/l	4.0	--	10
cis-1,3-Dichloropropene	ND		ug/l	4.0	--	10
1,3-Dichloropropene, Total	ND		ug/l	4.0	--	10
1,1-Dichloropropene	ND		ug/l	20	--	10
Bromoform	ND		ug/l	20	--	10
1,1,2,2-Tetrachloroethane	ND		ug/l	10	--	10
Benzene	ND		ug/l	5.0	--	10
Toluene	ND		ug/l	10	--	10
Ethylbenzene	ND		ug/l	10	--	10
Chloromethane	ND		ug/l	20	--	10
Bromomethane	ND		ug/l	20	--	10
Vinyl chloride	ND		ug/l	10	--	10
Chloroethane	ND		ug/l	20	--	10
1,1-Dichloroethene	ND		ug/l	10	--	10
trans-1,2-Dichloroethene	ND		ug/l	10	--	10



Project Name: TUFTS STREET**Lab Number:** L2516183**Project Number:** 045163**Report Date:** 03/27/25**SAMPLE RESULTS**

Lab ID: L2516183-03 D

Date Collected: 03/19/25 10:25

Client ID: 045163-GEO-6

Date Received: 03/20/25

Sample Location: SOMERVILLE, MA

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	35		ug/l	10	--	10
1,2-Dichlorobenzene	ND		ug/l	10	--	10
1,3-Dichlorobenzene	ND		ug/l	10	--	10
1,4-Dichlorobenzene	ND		ug/l	10	--	10
Methyl tert butyl ether	ND		ug/l	20	--	10
p/m-Xylene	ND		ug/l	20	--	10
o-Xylene	ND		ug/l	10	--	10
Xylenes, Total	ND		ug/l	10	--	10
cis-1,2-Dichloroethene	ND		ug/l	10	--	10
1,2-Dichloroethene, Total	ND		ug/l	10	--	10
Dibromomethane	ND		ug/l	20	--	10
1,2,3-Trichloropropane	ND		ug/l	20	--	10
Styrene	ND		ug/l	10	--	10
Dichlorodifluoromethane	ND		ug/l	20	--	10
Acetone	ND		ug/l	50	--	10
Carbon disulfide	ND		ug/l	20	--	10
Methyl ethyl ketone	ND		ug/l	50	--	10
Methyl isobutyl ketone	ND		ug/l	50	--	10
2-Hexanone	ND		ug/l	50	--	10
Bromochloromethane	ND		ug/l	20	--	10
Tetrahydrofuran	ND		ug/l	20	--	10
2,2-Dichloropropane	ND		ug/l	20	--	10
1,2-Dibromoethane	ND		ug/l	20	--	10
1,3-Dichloropropane	ND		ug/l	20	--	10
1,1,1,2-Tetrachloroethane	ND		ug/l	10	--	10
Bromobenzene	ND		ug/l	20	--	10
n-Butylbenzene	ND		ug/l	20	--	10
sec-Butylbenzene	ND		ug/l	20	--	10
tert-Butylbenzene	ND		ug/l	20	--	10
o-Chlorotoluene	ND		ug/l	20	--	10
p-Chlorotoluene	ND		ug/l	20	--	10
1,2-Dibromo-3-chloropropane	ND		ug/l	20	--	10
Hexachlorobutadiene	ND		ug/l	6.0	--	10
Isopropylbenzene	ND		ug/l	20	--	10
p-Isopropyltoluene	ND		ug/l	20	--	10
Naphthalene	ND		ug/l	20	--	10
n-Propylbenzene	ND		ug/l	20	--	10



Project Name: TUFTS STREET**Lab Number:** L2516183**Project Number:** 045163**Report Date:** 03/27/25**SAMPLE RESULTS**

Lab ID: L2516183-03 D

Date Collected: 03/19/25 10:25

Client ID: 045163-GEO-6

Date Received: 03/20/25

Sample Location: SOMERVILLE, MA

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	20	--	10
1,2,4-Trichlorobenzene	ND		ug/l	20	--	10
1,3,5-Trimethylbenzene	ND		ug/l	20	--	10
1,2,4-Trimethylbenzene	ND		ug/l	20	--	10
Diethyl ether	ND		ug/l	20	--	10
Ethyl-Tert-Butyl-Ether	ND		ug/l	20	--	10
Tertiary-Amyl Methyl Ether	ND		ug/l	20	--	10
1,4-Dioxane	ND		ug/l	2500	--	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	100		70-130

Project Name: TUFTS STREET**Lab Number:** L2516183**Project Number:** 045163**Report Date:** 03/27/25**SAMPLE RESULTS**

Lab ID: L2516183-04
 Client ID: 045163-MW106
 Sample Location: SOMERVILLE, MA

Date Collected: 03/19/25 12:05
 Date Received: 03/20/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 141,8260D
 Analytical Date: 03/26/25 11:04
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	3.5		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	1.3		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: TUFTS STREET

Lab Number: L2516183

Project Number: 045163

Report Date: 03/27/25

SAMPLE RESULTS

Lab ID: L2516183-04
 Client ID: 045163-MW106
 Sample Location: SOMERVILLE, MA

Date Collected: 03/19/25 12:05
 Date Received: 03/20/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	2.3		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2516183**Project Number:** 045163**Report Date:** 03/27/25**SAMPLE RESULTS**

Lab ID: L2516183-04
 Client ID: 045163-MW106
 Sample Location: SOMERVILLE, MA

Date Collected: 03/19/25 12:05
 Date Received: 03/20/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	113		70-130

Project Name: TUFTS STREET**Lab Number:** L2516183**Project Number:** 045163**Report Date:** 03/27/25**SAMPLE RESULTS**

Lab ID: L2516183-05
 Client ID: 045163-MW109
 Sample Location: SOMERVILLE, MA

Date Collected: 03/19/25 12:30
 Date Received: 03/20/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 141,8260D
 Analytical Date: 03/26/25 10:37
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	4.8		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2516183**Project Number:** 045163**Report Date:** 03/27/25**SAMPLE RESULTS**

Lab ID: L2516183-05
 Client ID: 045163-MW109
 Sample Location: SOMERVILLE, MA

Date Collected: 03/19/25 12:30
 Date Received: 03/20/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2516183**Project Number:** 045163**Report Date:** 03/27/25**SAMPLE RESULTS**

Lab ID: L2516183-05
 Client ID: 045163-MW109
 Sample Location: SOMERVILLE, MA

Date Collected: 03/19/25 12:30
 Date Received: 03/20/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	114		70-130

Project Name: 50 TUFTS STREET**Lab Number:** L2525107**Project Number:** 045163**Report Date:** 05/05/25**SAMPLE RESULTS**

Lab ID: L2525107-01
 Client ID: 045163-MW102
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/23/25 08:50
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 141,8260D
 Analytical Date: 04/29/25 13:35
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	5.5		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: 50 TUFTS STREET**Lab Number:** L2525107**Project Number:** 045163**Report Date:** 05/05/25**SAMPLE RESULTS**

Lab ID: L2525107-01
 Client ID: 045163-MW102
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/23/25 08:50
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: 50 TUFTS STREET**Lab Number:** L2525107**Project Number:** 045163**Report Date:** 05/05/25**SAMPLE RESULTS****Lab ID:** L2525107-01**Date Collected:** 04/23/25 08:50**Client ID:** 045163-MW102**Date Received:** 04/23/25**Sample Location:** SOMERVILLE, MASSACHUSETTS**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	117		70-130

Project Name: 50 TUFTS STREET**Lab Number:** L2525107**Project Number:** 045163**Report Date:** 05/05/25**SAMPLE RESULTS**

Lab ID: L2525107-02
 Client ID: 045163-MW121S
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/23/25 11:00
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water

Analytical Method: 141,8260D

Analytical Date: 05/01/25 07:00

Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: 50 TUFTS STREET**Lab Number:** L2525107**Project Number:** 045163**Report Date:** 05/05/25**SAMPLE RESULTS****Lab ID:** L2525107-02**Date Collected:** 04/23/25 11:00**Client ID:** 045163-MW121S**Date Received:** 04/23/25**Sample Location:** SOMERVILLE, MASSACHUSETTS**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: 50 TUFTS STREET**Lab Number:** L2525107**Project Number:** 045163**Report Date:** 05/05/25**SAMPLE RESULTS****Lab ID:** L2525107-02**Date Collected:** 04/23/25 11:00**Client ID:** 045163-MW121S**Date Received:** 04/23/25**Sample Location:** SOMERVILLE, MASSACHUSETTS**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	115		70-130

Project Name: 50 TUFTS STREET**Lab Number:** L2525107**Project Number:** 045163**Report Date:** 05/05/25**SAMPLE RESULTS**

Lab ID: L2525107-03
 Client ID: 045163-MW121D
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/23/25 11:40
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 141,8260D
 Analytical Date: 04/29/25 13:08
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	8.4		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	1.6		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	2.8		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	1.4		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: 50 TUFTS STREET**Lab Number:** L2525107**Project Number:** 045163**Report Date:** 05/05/25**SAMPLE RESULTS**

Lab ID: L2525107-03
 Client ID: 045163-MW121D
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/23/25 11:40
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	4.5		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	9.0		ug/l	1.0	--	1
1,2-Dichloroethene, Total	9.0		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: 50 TUFTS STREET**Lab Number:** L2525107**Project Number:** 045163**Report Date:** 05/05/25**SAMPLE RESULTS****Lab ID:** L2525107-03**Date Collected:** 04/23/25 11:40**Client ID:** 045163-MW121D**Date Received:** 04/23/25**Sample Location:** SOMERVILLE, MASSACHUSETTS**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	114		70-130

Project Name: 50 TUFTS STREET**Lab Number:** L2525107**Project Number:** 045163**Report Date:** 05/05/25**SAMPLE RESULTS**

Lab ID: L2525107-04
 Client ID: 045163-MW103
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/23/25 14:10
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 141,8260D
 Analytical Date: 04/29/25 12:41
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	27		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: 50 TUFTS STREET**Lab Number:** L2525107**Project Number:** 045163**Report Date:** 05/05/25**SAMPLE RESULTS**

Lab ID: L2525107-04
 Client ID: 045163-MW103
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/23/25 14:10
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	2.3		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: 50 TUFTS STREET**Lab Number:** L2525107**Project Number:** 045163**Report Date:** 05/05/25**SAMPLE RESULTS****Lab ID:** L2525107-04**Date Collected:** 04/23/25 14:10**Client ID:** 045163-MW103**Date Received:** 04/23/25**Sample Location:** SOMERVILLE, MASSACHUSETTS**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	110		70-130

Project Name: TUFTS STREET**Lab Number:** L2524944**Project Number:** 045163**Report Date:** 05/02/25**SAMPLE RESULTS**

Lab ID: L2524944-05
 Client ID: 045163-MW107
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 12:45
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 141,8260D
 Analytical Date: 05/01/25 12:46
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2524944**Project Number:** 045163**Report Date:** 05/02/25**SAMPLE RESULTS**

Lab ID: L2524944-05
 Client ID: 045163-MW107
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 12:45
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2524944**Project Number:** 045163**Report Date:** 05/02/25**SAMPLE RESULTS**

Lab ID: L2524944-05
 Client ID: 045163-MW107
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 12:45
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	113		70-130

Project Name: TUFTS STREET**Lab Number:** L2524944**Project Number:** 045163**Report Date:** 05/02/25**SAMPLE RESULTS**

Lab ID: L2524944-01
 Client ID: 045163-MW108
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 09:40
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 141,8260D
 Analytical Date: 05/01/25 11:00
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: TUFTS STREET

Lab Number: L2524944

Project Number: 045163

Report Date: 05/02/25

SAMPLE RESULTS

Lab ID: L2524944-01
 Client ID: 045163-MW108
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 09:40
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2524944**Project Number:** 045163**Report Date:** 05/02/25**SAMPLE RESULTS**

Lab ID: L2524944-01
 Client ID: 045163-MW108
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 09:40
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	113		70-130

Project Name: 50 TUFTS STREET**Lab Number:** L2525589**Project Number:** 045163**Report Date:** 05/15/25**SAMPLE RESULTS**

Lab ID: L2525589-05
 Client ID: 045163-MW111R
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/24/25 08:20
 Date Received: 04/25/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water

Analytical Method: 141,8260D

Analytical Date: 05/06/25 09:11

Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	39		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: 50 TUFTS STREET**Lab Number:** L2525589**Project Number:** 045163**Report Date:** 05/15/25**SAMPLE RESULTS**

Lab ID: L2525589-05
 Client ID: 045163-MW111R
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/24/25 08:20
 Date Received: 04/25/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	2.4		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	2.8		ug/l	1.0	--	1
1,2-Dichloroethene, Total	2.8		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	6.9		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	4.9		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: 50 TUFTS STREET**Lab Number:** L2525589**Project Number:** 045163**Report Date:** 05/15/25**SAMPLE RESULTS****Lab ID:** L2525589-05**Date Collected:** 04/24/25 08:20**Client ID:** 045163-MW111R**Date Received:** 04/25/25**Sample Location:** SOMERVILLE, MASSACHUSETTS**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	88		70-130
4-Bromofluorobenzene	80		70-130
Dibromofluoromethane	103		70-130

Project Name: TUFTS STREET**Lab Number:** L2513286**Project Number:** 045163**Report Date:** 03/17/25**SAMPLE RESULTS**

Lab ID: L2513286-01
 Client ID: 045163-MW111R
 Sample Location: SOMERVILLE, MA

Date Collected: 03/07/25 14:15
 Date Received: 03/10/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 141,8260D
 Analytical Date: 03/13/25 12:13
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	74		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2513286**Project Number:** 045163**Report Date:** 03/17/25**SAMPLE RESULTS**

Lab ID: L2513286-01
 Client ID: 045163-MW111R
 Sample Location: SOMERVILLE, MA

Date Collected: 03/07/25 14:15
 Date Received: 03/10/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	5.3		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	7.0		ug/l	1.0	--	1
1,2-Dichloroethene, Total	7.0		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	8.0		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2513286**Project Number:** 045163**Report Date:** 03/17/25**SAMPLE RESULTS**

Lab ID: L2513286-01
 Client ID: 045163-MW111R
 Sample Location: SOMERVILLE, MA

Date Collected: 03/07/25 14:15
 Date Received: 03/10/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	105		70-130

Project Name: 50 TUFTS STREET**Project Number:** 045163**Lab Number:** L2525591**Report Date:** 05/15/25**SAMPLE RESULTS**

Lab ID: L2525591-01

Client ID: 045163-MW112A

Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/25/25 10:45

Date Received: 04/25/25

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Analytical Method: 117,-

Analytical Date: 05/06/25 15:35

Analyst: BJB

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Air Lab							
Methane	5.31		ug/l	5.00	--	1	A
Ethene	ND		ug/l	3.00	--	1	A
Ethane	ND		ug/l	3.00	--	1	A

Project Name: 50 TUFTS STREET**Lab Number:** L2525591**Project Number:** 045163**Report Date:** 05/15/25**SAMPLE RESULTS**

Lab ID: L2525591-01 D
 Client ID: 045163-MW112A
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/25/25 10:45
 Date Received: 04/25/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water

Analytical Method: 141,8260D

Analytical Date: 05/06/25 14:06

Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	4.0	--	2
1,1-Dichloroethane	19		ug/l	2.0	--	2
Chloroform	ND		ug/l	2.0	--	2
Carbon tetrachloride	ND		ug/l	2.0	--	2
1,2-Dichloropropane	ND		ug/l	2.0	--	2
Dibromochloromethane	ND		ug/l	2.0	--	2
1,1,2-Trichloroethane	ND		ug/l	2.0	--	2
Tetrachloroethene	220		ug/l	2.0	--	2
Chlorobenzene	ND		ug/l	2.0	--	2
Trichlorofluoromethane	ND		ug/l	4.0	--	2
1,2-Dichloroethane	ND		ug/l	2.0	--	2
1,1,1-Trichloroethane	2.3		ug/l	2.0	--	2
Bromodichloromethane	ND		ug/l	2.0	--	2
trans-1,3-Dichloropropene	ND		ug/l	0.80	--	2
cis-1,3-Dichloropropene	ND		ug/l	0.80	--	2
1,3-Dichloropropene, Total	ND		ug/l	0.80	--	2
1,1-Dichloropropene	ND		ug/l	4.0	--	2
Bromoform	ND		ug/l	4.0	--	2
1,1,2,2-Tetrachloroethane	ND		ug/l	2.0	--	2
Benzene	ND		ug/l	1.0	--	2
Toluene	ND		ug/l	2.0	--	2
Ethylbenzene	ND		ug/l	2.0	--	2
Chloromethane	ND		ug/l	4.0	--	2
Bromomethane	ND		ug/l	4.0	--	2
Vinyl chloride	10		ug/l	2.0	--	2
Chloroethane	ND		ug/l	4.0	--	2
1,1-Dichloroethene	33		ug/l	2.0	--	2
trans-1,2-Dichloroethene	ND		ug/l	2.0	--	2



Project Name: 50 TUFTS STREET**Lab Number:** L2525591**Project Number:** 045163**Report Date:** 05/15/25**SAMPLE RESULTS**

Lab ID: L2525591-01 D
 Client ID: 045163-MW112A
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/25/25 10:45
 Date Received: 04/25/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	56		ug/l	2.0	--	2
1,2-Dichlorobenzene	ND		ug/l	2.0	--	2
1,3-Dichlorobenzene	ND		ug/l	2.0	--	2
1,4-Dichlorobenzene	ND		ug/l	2.0	--	2
Methyl tert butyl ether	ND		ug/l	4.0	--	2
p/m-Xylene	ND		ug/l	4.0	--	2
o-Xylene	ND		ug/l	2.0	--	2
Xylenes, Total	ND		ug/l	2.0	--	2
cis-1,2-Dichloroethene	99		ug/l	2.0	--	2
1,2-Dichloroethene, Total	99		ug/l	2.0	--	2
Dibromomethane	ND		ug/l	4.0	--	2
1,2,3-Trichloropropane	ND		ug/l	4.0	--	2
Styrene	ND		ug/l	2.0	--	2
Dichlorodifluoromethane	ND		ug/l	4.0	--	2
Acetone	ND		ug/l	10	--	2
Carbon disulfide	ND		ug/l	4.0	--	2
Methyl ethyl ketone	ND		ug/l	10	--	2
Methyl isobutyl ketone	ND		ug/l	10	--	2
2-Hexanone	ND		ug/l	10	--	2
Bromochloromethane	ND		ug/l	4.0	--	2
Tetrahydrofuran	ND		ug/l	4.0	--	2
2,2-Dichloropropane	ND		ug/l	4.0	--	2
1,2-Dibromoethane	ND		ug/l	4.0	--	2
1,3-Dichloropropane	ND		ug/l	4.0	--	2
1,1,1,2-Tetrachloroethane	ND		ug/l	2.0	--	2
Bromobenzene	ND		ug/l	4.0	--	2
n-Butylbenzene	ND		ug/l	4.0	--	2
sec-Butylbenzene	ND		ug/l	4.0	--	2
tert-Butylbenzene	ND		ug/l	4.0	--	2
o-Chlorotoluene	ND		ug/l	4.0	--	2
p-Chlorotoluene	ND		ug/l	4.0	--	2
1,2-Dibromo-3-chloropropane	ND		ug/l	4.0	--	2
Hexachlorobutadiene	ND		ug/l	1.2	--	2
Isopropylbenzene	ND		ug/l	4.0	--	2
p-Isopropyltoluene	ND		ug/l	4.0	--	2
Naphthalene	ND		ug/l	4.0	--	2
n-Propylbenzene	ND		ug/l	4.0	--	2



Project Name: 50 TUFTS STREET**Lab Number:** L2525591**Project Number:** 045163**Report Date:** 05/15/25**SAMPLE RESULTS**

Lab ID: L2525591-01 D
 Client ID: 045163-MW112A
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/25/25 10:45
 Date Received: 04/25/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	4.0	--	2
1,2,4-Trichlorobenzene	ND		ug/l	4.0	--	2
1,3,5-Trimethylbenzene	ND		ug/l	4.0	--	2
1,2,4-Trimethylbenzene	ND		ug/l	4.0	--	2
Diethyl ether	ND		ug/l	4.0	--	2
Diisopropyl Ether	ND		ug/l	4.0	--	2
Ethyl-Tert-Butyl-Ether	ND		ug/l	4.0	--	2
Tertiary-Amyl Methyl Ether	ND		ug/l	4.0	--	2
1,4-Dioxane	ND		ug/l	500	--	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	112		70-130



Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2525591
Report Date: 05/15/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 117,-
Analytical Date: 05/06/25 15:14
Analyst: BJB

Parameter	Result	Qualifier	Units	RL	MDL
Dissolved Gases by GC - Mansfield Air Lab for sample(s): 01 Batch: WG2063557-3					
Methane	ND		ug/l	5.00	-- A
Ethene	ND		ug/l	3.00	-- A
Ethane	ND		ug/l	3.00	-- A

Project Name: 50 TUFTS STREET**Lab Number:** L2525591**Project Number:** 045163**Report Date:** 05/15/25**SAMPLE RESULTS**

Lab ID: L2525591-01

Date Collected: 04/25/25 10:45

Client ID: 045163-MW112A

Date Received: 04/25/25

Sample Location: SOMERVILLE, MASSACHUSETTS

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Total Metals - Mansfield Lab											
Manganese, Total	1.48		mg/l	0.0100	--	1	05/01/25 10:33	05/06/25 18:06	EPA 3005A	97,6010D	EFM



Project Name: 50 TUFTS STREET

Project Number: 045163

Lab Number: L2525591

Report Date: 05/15/25

SAMPLE RESULTS

Lab ID: L2525591-01

Client ID: 045163-MW112A

Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/25/25 10:45

Date Received: 04/25/25

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Alkalinity, Total	246.		mg CaCO3/L	2.00	NA	1	-	05/05/25 11:49	121,2320B	MKT
Chlorine, Total Residual	0.06		mg/l	0.02	--	1	04/26/25 09:20	04/26/25 09:43	121,4500CL-G	DMO
Chloride	490		mg/l	25	--	25	-	05/03/25 04:57	1,9251	MRM
Nitrogen, Nitrate	0.307		mg/l	0.100	--	1	-	04/26/25 09:06	121,4500NO3-F	MRM
Nitrogen, Nitrate/Nitrite	0.36		mg/l	0.10	--	1	-	05/06/25 07:42	121,4500NO3-F	KAF
Total Nitrogen	0.69		mg/l	0.30	--	1	-	05/14/25 15:58	107,-	JRO
Nitrogen, Total Kjeldahl	0.326		mg/l	0.300	--	1	05/12/25 22:54	05/13/25 21:14	121,4500NH3-H	AT
Sulfate	71.		mg/l	25	--	2.5	05/06/25 11:15	05/06/25 11:15	1,9038	MRW
Total Organic Carbon	ND		mg/l	0.50	--	1	-	05/01/25 02:02	1,9060A	DEW
Surfactants, MBAS	ND		mg/l	0.050	--	1	04/26/25 05:00	04/26/25 07:53	121,5540C	CAR
Iron, Ferrous	ND		mg/l	0.50	--	1	-	04/26/25 04:52	121,3500FE-B	CAR





Pace Analytical Services, LLC - East Longmeadow, Ma

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: L2525591

Sample Description:

Work Order: 25D2215

Date Received: 4/28/2025

Field Sample #: 045163-MW112A

Sampled: 4/25/2025 10:45

Sample ID: 25D2215-01

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Sulfide	ND	2.0	mg/L	1		SM21-24 4500S-F	5/1/25	5/1/25 16:20	EC

Project Name: TUFTS STREET**Lab Number:** L2524944**Project Number:** 045163**Report Date:** 05/02/25**SAMPLE RESULTS**

Lab ID: L2524944-07
 Client ID: 045163-MW115R
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 14:00
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 141,8260D
 Analytical Date: 05/01/25 13:40
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2524944**Project Number:** 045163**Report Date:** 05/02/25**SAMPLE RESULTS**

Lab ID: L2524944-07
 Client ID: 045163-MW115R
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 14:00
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2524944**Project Number:** 045163**Report Date:** 05/02/25**SAMPLE RESULTS**

Lab ID: L2524944-07
 Client ID: 045163-MW115R
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 14:00
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	116		70-130

Project Name: 50 TUFTS STREET**Lab Number:** L2525589**Project Number:** 045163**Report Date:** 05/15/25**SAMPLE RESULTS**

Lab ID: L2525589-01
 Client ID: 045163-MW116
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/24/25 09:25
 Date Received: 04/25/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water

Analytical Method: 141,8260D

Analytical Date: 05/08/25 09:01

Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	26		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	160		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	2.6		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	61		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	22		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: 50 TUFTS STREET**Lab Number:** L2525589**Project Number:** 045163**Report Date:** 05/15/25**SAMPLE RESULTS****Lab ID:** L2525589-01**Date Collected:** 04/24/25 09:25**Client ID:** 045163-MW116**Date Received:** 04/25/25**Sample Location:** SOMERVILLE, MASSACHUSETTS**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	68		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	110		ug/l	1.0	--	1
1,2-Dichloroethene, Total	110		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: 50 TUFTS STREET**Lab Number:** L2525589**Project Number:** 045163**Report Date:** 05/15/25**SAMPLE RESULTS****Lab ID:** L2525589-01**Date Collected:** 04/24/25 09:25**Client ID:** 045163-MW116**Date Received:** 04/25/25**Sample Location:** SOMERVILLE, MASSACHUSETTS**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	108		70-130

Project Name: 50 TUFTS STREET**Lab Number:** L2525589**Project Number:** 045163**Report Date:** 05/15/25**SAMPLE RESULTS**

Lab ID: L2525589-02
 Client ID: 045163-MW900
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/24/25 12:00
 Date Received: 04/25/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 141,8260D
 Analytical Date: 05/08/25 08:34
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	25		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	150		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	2.6		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	61		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	22		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: 50 TUFTS STREET**Lab Number:** L2525589**Project Number:** 045163**Report Date:** 05/15/25**SAMPLE RESULTS**

Lab ID: L2525589-02
 Client ID: 045163-MW900
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/24/25 12:00
 Date Received: 04/25/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	66		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	110		ug/l	1.0	--	1
1,2-Dichloroethene, Total	110		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: 50 TUFTS STREET**Lab Number:** L2525589**Project Number:** 045163**Report Date:** 05/15/25**SAMPLE RESULTS****Lab ID:** L2525589-02**Date Collected:** 04/24/25 12:00**Client ID:** 045163-MW900**Date Received:** 04/25/25**Sample Location:** SOMERVILLE, MASSACHUSETTS**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	107		70-130

Project Name: TUFTS STREET**Lab Number:** L2524944**Project Number:** 045163**Report Date:** 05/02/25**SAMPLE RESULTS**

Lab ID: L2524944-03
 Client ID: 045163-MW118
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 11:37
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 141,8260D
 Analytical Date: 05/01/25 11:53
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	12		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	1.5		ug/l	1.0	--	1
Chloroethane	5.6		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2524944**Project Number:** 045163**Report Date:** 05/02/25**SAMPLE RESULTS**

Lab ID: L2524944-03
 Client ID: 045163-MW118
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 11:37
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	2.3		ug/l	1.0	--	1
1,2-Dichloroethene, Total	2.3		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2524944**Project Number:** 045163**Report Date:** 05/02/25**SAMPLE RESULTS**

Lab ID: L2524944-03
 Client ID: 045163-MW118
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 11:37
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	114		70-130

Project Name: TUFTS STREET**Lab Number:** L2524947**Project Number:** 045163**Report Date:** 05/06/25**SAMPLE RESULTS**

Lab ID: L2524947-04
 Client ID: 045163-MW118S
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 11:35
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 141,8260D
 Analytical Date: 05/01/25 15:53
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2524947**Project Number:** 045163**Report Date:** 05/06/25**SAMPLE RESULTS**

Lab ID: L2524947-04
 Client ID: 045163-MW118S
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 11:35
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	11		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2524947**Project Number:** 045163**Report Date:** 05/06/25**SAMPLE RESULTS**

Lab ID: L2524947-04
 Client ID: 045163-MW118S
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 11:35
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	117		70-130

Project Name: TUFTS STREET**Lab Number:** L2524947**Project Number:** 045163**Report Date:** 05/06/25**SAMPLE RESULTS**

Lab ID: L2524947-05
 Client ID: 045163-MW118T
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 12:25
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 141,8260D
 Analytical Date: 05/02/25 10:20
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	7.3		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2524947**Project Number:** 045163**Report Date:** 05/06/25**SAMPLE RESULTS**

Lab ID: L2524947-05
 Client ID: 045163-MW118T
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 12:25
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	2.5		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2524947**Project Number:** 045163**Report Date:** 05/06/25**SAMPLE RESULTS**

Lab ID: L2524947-05
 Client ID: 045163-MW118T
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 12:25
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	91		70-130
Dibromofluoromethane	119		70-130

Project Name: TUFTS STREET**Lab Number:** L2524944**Project Number:** 045163**Report Date:** 05/02/25**SAMPLE RESULTS**

Lab ID: L2524944-06
 Client ID: 045163-MW119S
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 13:45
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water

Analytical Method: 141,8260D

Analytical Date: 05/01/25 13:13

Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2524944**Project Number:** 045163**Report Date:** 05/02/25**SAMPLE RESULTS**

Lab ID: L2524944-06
 Client ID: 045163-MW119S
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 13:45
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2524944**Project Number:** 045163**Report Date:** 05/02/25**SAMPLE RESULTS**

Lab ID: L2524944-06
 Client ID: 045163-MW119S
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 13:45
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	115		70-130

Project Name: TUFTS STREET**Lab Number:** L2524944**Project Number:** 045163**Report Date:** 05/02/25**SAMPLE RESULTS**

Lab ID: L2524944-08
 Client ID: 045163-MW119T
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 14:30
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 141,8260D
 Analytical Date: 05/01/25 14:06
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	2.2		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	3.3		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2524944**Project Number:** 045163**Report Date:** 05/02/25**SAMPLE RESULTS**

Lab ID: L2524944-08
 Client ID: 045163-MW119T
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 14:30
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	3.0		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2524944**Project Number:** 045163**Report Date:** 05/02/25**SAMPLE RESULTS**

Lab ID: L2524944-08
 Client ID: 045163-MW119T
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 14:30
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	116		70-130

Project Name: TUFTS STREET**Lab Number:** L2524944**Project Number:** 045163**Report Date:** 05/02/25**SAMPLE RESULTS**

Lab ID: L2524944-04
 Client ID: 045163-MW120D
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 12:20
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 141,8260D
 Analytical Date: 05/01/25 12:20
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	1.9		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	5.0		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	1.3		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2524944**Project Number:** 045163**Report Date:** 05/02/25**SAMPLE RESULTS**

Lab ID: L2524944-04
 Client ID: 045163-MW120D
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 12:20
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	2.2		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2524944**Project Number:** 045163**Report Date:** 05/02/25**SAMPLE RESULTS**

Lab ID: L2524944-04
 Client ID: 045163-MW120D
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 12:20
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	113		70-130

Project Name: TUFTS STREET**Lab Number:** L2524944**Project Number:** 045163**Report Date:** 05/02/25**SAMPLE RESULTS**

Lab ID: L2524944-02
 Client ID: 045163-MW120S
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 11:00
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 141,8260D
 Analytical Date: 05/01/25 11:26
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2524944**Project Number:** 045163**Report Date:** 05/02/25**SAMPLE RESULTS**

Lab ID: L2524944-02
 Client ID: 045163-MW120S
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 11:00
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2524944**Project Number:** 045163**Report Date:** 05/02/25**SAMPLE RESULTS**

Lab ID: L2524944-02
 Client ID: 045163-MW120S
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 11:00
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	114		70-130

Project Name: 50 TUFTS STREET**Lab Number:** L2525589**Project Number:** 045163**Report Date:** 05/15/25**SAMPLE RESULTS**

Lab ID: L2525589-06 D
 Client ID: 045163-MW122
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/24/25 13:10
 Date Received: 04/25/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water

Analytical Method: 141,8260D

Analytical Date: 05/06/25 13:39

Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	20	--	10
1,1-Dichloroethane	ND		ug/l	10	--	10
Chloroform	ND		ug/l	10	--	10
Carbon tetrachloride	ND		ug/l	10	--	10
1,2-Dichloropropane	ND		ug/l	10	--	10
Dibromochloromethane	ND		ug/l	10	--	10
1,1,2-Trichloroethane	ND		ug/l	10	--	10
Tetrachloroethene	840		ug/l	10	--	10
Chlorobenzene	ND		ug/l	10	--	10
Trichlorofluoromethane	ND		ug/l	20	--	10
1,2-Dichloroethane	ND		ug/l	10	--	10
1,1,1-Trichloroethane	ND		ug/l	10	--	10
Bromodichloromethane	ND		ug/l	10	--	10
trans-1,3-Dichloropropene	ND		ug/l	4.0	--	10
cis-1,3-Dichloropropene	ND		ug/l	4.0	--	10
1,3-Dichloropropene, Total	ND		ug/l	4.0	--	10
1,1-Dichloropropene	ND		ug/l	20	--	10
Bromoform	ND		ug/l	20	--	10
1,1,2,2-Tetrachloroethane	ND		ug/l	10	--	10
Benzene	ND		ug/l	5.0	--	10
Toluene	ND		ug/l	10	--	10
Ethylbenzene	ND		ug/l	10	--	10
Chloromethane	ND		ug/l	20	--	10
Bromomethane	ND		ug/l	20	--	10
Vinyl chloride	ND		ug/l	10	--	10
Chloroethane	ND		ug/l	20	--	10
1,1-Dichloroethene	ND		ug/l	10	--	10
trans-1,2-Dichloroethene	ND		ug/l	10	--	10



Project Name: 50 TUFTS STREET**Lab Number:** L2525589**Project Number:** 045163**Report Date:** 05/15/25**SAMPLE RESULTS**

Lab ID: L2525589-06 D
 Client ID: 045163-MW122
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/24/25 13:10
 Date Received: 04/25/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	100		ug/l	10	--	10
1,2-Dichlorobenzene	ND		ug/l	10	--	10
1,3-Dichlorobenzene	ND		ug/l	10	--	10
1,4-Dichlorobenzene	ND		ug/l	10	--	10
Methyl tert butyl ether	ND		ug/l	20	--	10
p/m-Xylene	ND		ug/l	20	--	10
o-Xylene	ND		ug/l	10	--	10
Xylenes, Total	ND		ug/l	10	--	10
cis-1,2-Dichloroethene	76		ug/l	10	--	10
1,2-Dichloroethene, Total	76		ug/l	10	--	10
Dibromomethane	ND		ug/l	20	--	10
1,2,3-Trichloropropane	ND		ug/l	20	--	10
Styrene	ND		ug/l	10	--	10
Dichlorodifluoromethane	ND		ug/l	20	--	10
Acetone	ND		ug/l	50	--	10
Carbon disulfide	ND		ug/l	20	--	10
Methyl ethyl ketone	ND		ug/l	50	--	10
Methyl isobutyl ketone	ND		ug/l	50	--	10
2-Hexanone	ND		ug/l	50	--	10
Bromochloromethane	ND		ug/l	20	--	10
Tetrahydrofuran	ND		ug/l	20	--	10
2,2-Dichloropropane	ND		ug/l	20	--	10
1,2-Dibromoethane	ND		ug/l	20	--	10
1,3-Dichloropropane	ND		ug/l	20	--	10
1,1,1,2-Tetrachloroethane	ND		ug/l	10	--	10
Bromobenzene	ND		ug/l	20	--	10
n-Butylbenzene	ND		ug/l	20	--	10
sec-Butylbenzene	ND		ug/l	20	--	10
tert-Butylbenzene	ND		ug/l	20	--	10
o-Chlorotoluene	ND		ug/l	20	--	10
p-Chlorotoluene	ND		ug/l	20	--	10
1,2-Dibromo-3-chloropropane	ND		ug/l	20	--	10
Hexachlorobutadiene	ND		ug/l	6.0	--	10
Isopropylbenzene	ND		ug/l	20	--	10
p-Isopropyltoluene	ND		ug/l	20	--	10
Naphthalene	ND		ug/l	20	--	10
n-Propylbenzene	ND		ug/l	20	--	10



Project Name: 50 TUFTS STREET**Lab Number:** L2525589**Project Number:** 045163**Report Date:** 05/15/25**SAMPLE RESULTS**

Lab ID: L2525589-06 D
 Client ID: 045163-MW122
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/24/25 13:10
 Date Received: 04/25/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	20	--	10
1,2,4-Trichlorobenzene	ND		ug/l	20	--	10
1,3,5-Trimethylbenzene	ND		ug/l	20	--	10
1,2,4-Trimethylbenzene	ND		ug/l	20	--	10
Diethyl ether	ND		ug/l	20	--	10
Diisopropyl Ether	ND		ug/l	20	--	10
Ethyl-Tert-Butyl-Ether	ND		ug/l	20	--	10
Tertiary-Amyl Methyl Ether	ND		ug/l	20	--	10
1,4-Dioxane	ND		ug/l	2500	--	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	88		70-130
Dibromofluoromethane	107		70-130

Project Name: 50 TUFTS STREET**Lab Number:** L2525102**Project Number:** 045163**Report Date:** 05/13/25**SAMPLE RESULTS**

Lab ID: L2525102-06
 Client ID: 045163-MW301
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/23/25 12:10
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 141,8260D
 Analytical Date: 04/29/25 08:34
 Analyst: RAW

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: 50 TUFTS STREET**Lab Number:** L2525102**Project Number:** 045163**Report Date:** 05/13/25**SAMPLE RESULTS**

Lab ID: L2525102-06
 Client ID: 045163-MW301
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/23/25 12:10
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	2.0		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: 50 TUFTS STREET**Lab Number:** L2525102**Project Number:** 045163**Report Date:** 05/13/25**SAMPLE RESULTS****Lab ID:** L2525102-06**Date Collected:** 04/23/25 12:10**Client ID:** 045163-MW301**Date Received:** 04/23/25**Sample Location:** SOMERVILLE, MASSACHUSETTS**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	123		70-130
Toluene-d8	89		70-130
4-Bromofluorobenzene	84		70-130
Dibromofluoromethane	105		70-130

June 25, 2025
Project No. 04516-3

Sanctuary Condominium Trust
Charlesgate
867 Boylston Street
Boston, MA 02116

**Re: Groundwater Sampling Results
60 Tufts Street
Somerville, Massachusetts**

To Whom It May Concern:

On behalf of UniFirst Corporation, GEI Consultants, Inc. is providing results of the groundwater sampling conducted at 60 Tufts Street on April 23, 2025. The sampling was conducted as part of our investigation related to the site at 50 Tufts Street in Somerville, Massachusetts. We collected groundwater samples from monitoring wells MW201 and MW202, located on your property.

The groundwater samples were submitted for chemical testing for volatile organic compounds (VOCs). We have attached a summary table of the chemicals detected in the groundwater samples along with the previous sampling results, and the laboratory data sheets for the recent sampling.

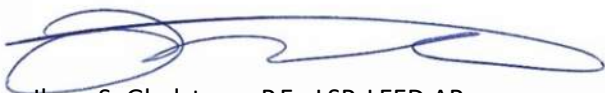
Thank you for permitting GEI to conduct groundwater sampling at your property.

Individuals and public officials may request additional public involvement activities under the Massachusetts Contingency Plan (MCP; 310 CMR 40.1403(10) and 40.1404). The property owner may also request additional documentation, such as that listed at 310 CMR 40.0017(3), associated with the above-referenced samples. We will provide such additional documentation within 30 days of our receipt of such a request.

We appreciate your continued cooperation throughout the sampling process. If you have any immediate questions regarding the water testing results, please do not hesitate to contact me at 781 721-4012 or igladstone@geiconsultants.com.

Sincerely,

GEI CONSULTANTS, INC.



Ileen S. Gladstone, P.E., LSP, LEED AP
Senior Vice President



Christopher O. Coner, CHMM
Project Manager

Enclosures

cc: Catherine Malagrida, UniFirst Corporation
MassDEP-NERO (as part of Status Report)



**Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup**

BWSC123

This Notice is Related to:
Release Tracking Number

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

3 - 23246

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: 50 Tufts Street
City/Town: Somerville Zip Code: 02145-4129

B. This notice is being provided to the following party:

1. Name: Property Manager
2. Street Address: Sanctuary Condominium Trust, Charlesgate, 867 Boylston St
City/Town: Boston, MA Zip Code: 02116

C. This notice is being given to inform its recipient (the party listed in Section B):

- ☒ 1. That environmental sampling ~~will be~~/has been conducted at property owned by the recipient of this notice.
- ☒ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.
- ☒ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling ~~will be~~/has been conducted:

1. Street Address: 60 Tufts Street
City/Town: Somerville, MA Zip Code: 02145-4110
2. MCP phase of work during which the sampling ~~will be~~/has been conducted:
- | | |
|---|--|
| ☐ Immediate Response Action | ☐ Phase III Feasibility Evaluation |
| ☐ Release Abatement Measure | ☐ Phase IV Remedy Implementation Plan |
| ☐ Utility-related Abatement Measure | ☒ Phase V/Remedy Operation Status |
| ☐ Phase I Initial Site Investigation | ☐ Post-Temporary Solution Operation, Maintenance and Monitoring |
| ☐ Phase II Comprehensive Site Assessment | ☐ Other _____ |
- (specify)
3. Description of property where sampling ~~will be~~/has been conducted:
☒ residential ☐ commercial ☐ industrial ☐ school/playground ☒ Other Condominiums
(specify)
4. Description of the sampling locations and types (e.g., soil, groundwater, indoor air, soil gas) to the extent known at the time of this notice.

Annual Groundwater Sampling

E. Contact information related to the party providing this notice:

Contact Name: Ileen Gladstone, P.E., LSP, LEED AP
Street Address: GEI Consultants, Inc., 400 Unicorn Park Drive
City/Town: Woburn, MA Zip Code: 01801-3341
Telephone: (781) 721-4012 Email: igladstone@geiconsultants.com



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

3

- 23246

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation of a release for which a notification to MassDEP has been made under the Massachusetts Contingency Plan (310 CMR 40.0300) on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at <http://www.mass.gov/eea/agencies/massdep/cleanup>. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See <http://public.dep.state.ma.us/SearchableSites2/Search.aspx> to view site-specific files on-line or <http://mass.gov/eea/agencies/massdep/about/contacts/conduct-a-file-review.html> if you would like to make an appointment to see these files in person. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Chemical Testing Results - GEI Groundwater Sampling
50 Tufts Street
Somerville, Massachusetts

Sample Location: Sample Name: Well Screen Interval (ft bgs): Sample Date: Collected By:					MW201	MW201	MW201	MW201	MW201	MW201	MW202	MW202	MW202	MW202	MW202	MW202	MW202	MW202	MW202	MW202	MW202	MW202
					MW201	MW201	MW201	MW201	MW201	MW201	MW202	MW202	MW202	MW202	MW202	MW202	MW202	MW202	MW202	MW202	MW202	MW202
					11 to 21	11 to 21	11 to 21	11 to 21	11 to 21	11 to 21	10.5 to 20.5	10.5 to 20.5	10.5 to 20.5	10.5 to 20.5	10.5 to 20.5	10.5 to 20.5	10.5 to 20.5	10.5 to 20.5	10.5 to 20.5	10.5 to 20.5	10.5 to 20.5	10.5 to 20.5
					7/19/07	10/12/07	1/11/08	4/15/08	4/3/24	4/23/25	7/19/07	10/12/07	1/11/08	4/15/08	7/15/08	10/21/08	1/13/09	4/15/09	7/14/09	10/14/09	4/12/10	4/22/11
					GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI
Analyte	Method	Units	Method 1 GW-2 Standard	Method 1 GW-3 Standard																		
Volatile Organic Compounds (VOCs)																						
Acetone	8260	µg/l	50000	50000	NT	< 5.0 J+	< 5.0	< 5.0	<5.0	<5.0	NT	< 5.0 J+	< 5.0	< 5.0	< 5.0	< 5.0 J+	< 5.0	< 5.0	< 5.0	< 5.0 J+	< 5.0	< 5.0
Benzene			1000	10000	NT	< 0.50	< 0.50	< 0.50	<0.5	<0.50	NT	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50 J+	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bromodichloromethane			6	50000	NT	< 1.0	< 1.0	< 1.0	<1.0	<1.0	NT	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0 J+	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
2-Butanone (MEK)			50000	50000	NT	< 5.0 J+	< 5.0	< 5.0	<5.0	<5.0	NT	< 5.0 J+	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Carbon disulfide			NS	NS	NT	< 5.0	< 5.0	< 5.0	<2.0	<2.0	NT	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Carbon tetrachloride			2	5000	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0 J+	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorobenzene			200	1000	NT	< 1.0	< 1.0	< 1.0	<1.0	<1.0	NT	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane			NS	NS	< 2.0	< 2.0	< 2.0	< 2.0	<2.0	<2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Chloroform			50	20000	NT	0.47 J	0.40 J	0.24 J	<1.0	<1.0	NT	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	0.89 J	< 1.0	< 1.0
Chloromethane			NS	NS	NT	< 2.0	< 2.0	< 2.0	<2.0	<2.0	NT	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
1,4-Dichlorobenzene			60	8000	NT	< 1.0	< 1.0	< 1.0	<1.0	<1.0	NT	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane			2000	20000	< 1.0	0.66 J	< 1.0	0.23 J	<1.0	<1.0	0.50 J	< 1.0	< 1.0	0.46 J	< 1.0	< 1.0	0.34 J	< 1.0	< 1.0	3.1	5.0	1.1
1,2-Dichloroethane			5	20000	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0 J+	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethylene			80	30000	4.7	4.9	5.2	3.0	1.3	<1.0	1.1	< 1.0	< 1.0	2.9	2.8	1.6	1.9	3.2	< 1.0	< 1.0	< 1.0	15.5
cis-1,2-Dichloroethylene			20	50000	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,2-Dichloroethylene			90	50000	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane			3	50000	NT	< 2.0	< 2.0	< 2.0	<1.0	<1.0	NT	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0 J+	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
1,4-Dioxane			5000	50000	NT	< 25	< 25	< 25	<250	<250	NT	< 25	< 25	< 25	< 25	< 25	< 25 J+	< 25 J+	< 25	< 25	< 25	< 25 K-
Ethylbenzene			20000	5000	NT	< 1.0	< 1.0	< 1.0	<1.0	<1.0	NT	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
2-Hexanone			NS	NS	NT	< 5.0 J+	< 5.0	< 5.0	<5.0	<5.0	NT	< 5.0 J+	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
4-Isopropyltoluene			NS	NS	NT	< 5.0	< 5.0	< 5.0	<2.0	<2.0	NT	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0 J+	< 5.0	< 5.0	< 5.0	11.3	< 5.0
Methyl tert-butyl ether			50000	50000	NT	75.8	240	0.26 J	<2.0	<2.0	NT	< 1.0	< 1.0	1.2	< 1.0	< 1.0	0.92 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methylene chloride			2000	50000	NT	< 2.0	< 2.0	< 2.0	<2.0	<2.0	NT	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Naphthalene			700	20000	NT	< 5.0	< 5.0	< 5.0	<2.0	<2.0	NT	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0 J+	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Tert-amyl methyl ether			NS	NS	NT	4.6	17.7	< 2.0	<2.0	<2.0	NT	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
1,1,1,2-Tetrachloroethane			10	50000	NT	< 5.0	< 5.0	< 5.0	<1.0	<1.0	NT	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Tetrachloroethylene (PCE)			20	30000	5.1	19.6	25.8	18.0	4.8	9 K+	17.2	14.6	21.8	55.6	48.5	39.4	37.5	53.5	52.6	61.8	84.9	86.5
Tetrahydrofuran			NS	NS	NT	< 10	< 10	< 10	<2.0	<2.0	NT	< 10	< 10	< 10	< 10	< 10	< 10 J+	< 10	< 10	< 10	< 10	< 10
Toluene			50000	40000	NT	< 1.0	< 1.0	< 1.0	<1.0	<1.0	NT	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0 J+	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane (TCA)			4000	20000	9.8	36.3	32.9	7.3	3.9	2.7	12.5	4.4	4.2	35.2	18.9	7.1	8.0	15.7	6.6	14.3 J+	16.8	18.6
1,1,2-Trichloroethane			900	50000	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0 J+	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethylene (TCE)			5	5000	4.5	7.2	8.2	6.4	2.1	2.5	2.2	1.5	1.6	6.9	8.6	5.3	5.6	11.8 J+	7.2	9.8	12.9	8.2
Vinyl chloride			2	50000	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
m,p-Xylene			3000	5000	NT	< 1.0	< 1.0	< 1.0	<2.0	<2.0	NT	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene			3000	5000	NT	< 1.0	< 1.0	< 1.0	<1.0	<1.0	NT	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Xylene			3000	5000	NT	< 1.0	< 1.0	< 1.0	<1.0	<1.0	NT	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

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 8. * = micrograms CaCO3 per liter

- Qualifying Notes:**
- B The analyte found in associated method blank.
 - C+ The result has a high bias due to surrogate recovery above upper control limits.
 - E The value exceeds the calibration range.
 - F+ The result has a high bias due to matrix spike recovery above upper control limits.
 - F- The result has a low bias due to matrix spike recovery below lower control limits.
 - G The result is estimated due to duplicate precision outside control limits.
 - J The reported result is below the laboratory reporting limit and is estimated.
 - J+ The reported result is estimated.
 - K- The result has a low bias due to blank spike or laboratory control sample recovery below lower control limits.
 - K+ The result has a high bias due to blank spike or laboratory control sample recovery above upper control limits.
 - R The result is rejected due to gross exceedence of minimum response factor criteria.

Chemical Testing Results - GEI Groundwater Sampling
50 Tufts Street
Somerville, Massachusetts

Sample Location: Sample Name: Well Screen Interval (ft bgs): Sample Date: Collected By:					MW202	MW202	MW202	MW202	MW202	MW202	MW202	MW202	MW202	MW202	MW202	MW202	MW202
					MW202	MW202	MW202	MW202	MW202	MW202	MW202	MW202	MW202	MW202	MW202	MW202	MW202
					10.5 to 20.5	10.5 to 20.5	10.5 to 20.5	10.5 to 20.5	10.5 to 20.5	10.5 to 20.5	10.5 to 20.5	10.5 to 20.5	10.5 to 20.5	10.5 to 20.5	10.5 to 20.5	10.5 to 20.5	10.5 to 20.5
					4/23/13	5/1/14	4/2/15	4/29/16	4/17/17	4/4/18	4/16/19	4/17/20	4/14/21	4/13/22	4/18/23	4/3/24	4/23/25
					GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI
Analyte	Method	Units	Method 1 GW-2 Standard	Method 1 GW-3 Standard													
Volatile Organic Compounds (VOCs)					8260	µg/l											
Acetone			50000	50000	< 10	< 10	< 10	9.7	<10	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Benzene			1000	10000	< 0.50	< 0.50	< 0.50	< 0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.5	<0.50
Bromodichloromethane			6	50000	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2-Butanone (MEK)			50000	50000	< 5.0	< 5.0	< 5.0	< 5.0	<10	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon disulfide			NS	NS	< 5.0	< 5.0	< 5.0	< 5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Carbon tetrachloride			2	5000	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorobenzene			200	1000	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroethane			NS	NS	< 2.0	< 2.0	< 2.0	< 2.0	<1.0	<1.0	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloroform			50	20000	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloromethane			NS	NS	< 2.0	< 2.0	< 2.0	< 2.0	<1.0	<1.0	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,4-Dichlorobenzene			60	8000	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane			2000	20000	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethane			5	20000	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethylene			80	30000	2.4	0.93 J	0.92 J	< 1.0	0.46 J	1.1	1.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethylene			20	50000	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethylene			90	50000	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloropropane			3	50000	< 2.0	< 2.0	< 2.0	< 2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,4-Dioxane			5000	50000	< 50	< 50	<25	<25	<130	<130	<130	<250	<250	<250	<250	<250	<250
Ethylbenzene			20000	5000	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2-Hexanone			NS	NS	< 5.0	< 5.0	< 5.0	< 5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
4-Isopropyltoluene			NS	NS	< 5.0	< 5.0	< 5.0	< 5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Methyl tert-butyl ether			50000	50000	< 1.0 K-	< 1.0	< 1.0	< 1.0	<1.0	<1.0	1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Methylene chloride			2000	50000	< 2.0	< 2.0	< 2.0	< 2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Naphthalene			700	20000	< 5.0	< 5.0	< 5.0	< 5.0	<5.0	<5.0	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Tert-amyl methyl ether			NS	NS	< 2.0	< 2.0	< 2.0	< 2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1,1,2-Tetrachloroethane			10	50000	< 5.0	< 5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Tetrachloroethylene (PCE)			20	30000	37.0	31.4	28.1	40.8 K+	20.0	39.4	68.9	20.0	14.0	5.4	12.0	9.4	13
Tetrahydrofuran			NS	NS	< 10	< 10	< 10	< 10	<10	<10	<10	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Toluene			50000	40000	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,1-Trichloroethane (TCA)			4000	20000	5.2	6.9	7.4	7.1	3.5	8.1	9.8	2.7	1.7	<1.0	1.2	1.4	1.5
1,1,2-Trichloroethane			900	50000	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethylene (TCE)			5	5000	2.5	1.5	1.4	1.5	0.81 J	1.5	2.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl chloride			2	50000	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
m,p-Xylene			3000	5000	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
o-Xylene			3000	5000	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Total Xylene			3000	5000	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

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 - R The result is rejected due to gross exceedence of minimum response factor criteria.

Project Name: 50 TUFTS STREET**Lab Number:** L2525102**Project Number:** 045163**Report Date:** 05/13/25**SAMPLE RESULTS**

Lab ID: L2525102-01
 Client ID: 045163-MW202
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/23/25 09:30
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water

Analytical Method: 141,8260D

Analytical Date: 04/29/25 07:02

Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	13		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	1.5		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: 50 TUFTS STREET**Lab Number:** L2525102**Project Number:** 045163**Report Date:** 05/13/25**SAMPLE RESULTS****Lab ID:** L2525102-01**Date Collected:** 04/23/25 09:30**Client ID:** 045163-MW202**Date Received:** 04/23/25**Sample Location:** SOMERVILLE, MASSACHUSETTS**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: 50 TUFTS STREET**Lab Number:** L2525102**Project Number:** 045163**Report Date:** 05/13/25**SAMPLE RESULTS****Lab ID:** L2525102-01**Date Collected:** 04/23/25 09:30**Client ID:** 045163-MW202**Date Received:** 04/23/25**Sample Location:** SOMERVILLE, MASSACHUSETTS**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	122		70-130
Toluene-d8	90		70-130
4-Bromofluorobenzene	85		70-130
Dibromofluoromethane	102		70-130

Project Name: 50 TUFTS STREET**Lab Number:** L2525102**Project Number:** 045163**Report Date:** 05/13/25**SAMPLE RESULTS**

Lab ID: L2525102-02
 Client ID: 045163-MW201
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/23/25 10:15
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water

Analytical Method: 141,8260D

Analytical Date: 04/29/25 07:25

Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	9.0		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	2.7		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: 50 TUFTS STREET**Lab Number:** L2525102**Project Number:** 045163**Report Date:** 05/13/25**SAMPLE RESULTS**

Lab ID: L2525102-02
 Client ID: 045163-MW201
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/23/25 10:15
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	2.5		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: 50 TUFTS STREET**Lab Number:** L2525102**Project Number:** 045163**Report Date:** 05/13/25**SAMPLE RESULTS****Lab ID:** L2525102-02**Date Collected:** 04/23/25 10:15**Client ID:** 045163-MW201**Date Received:** 04/23/25**Sample Location:** SOMERVILLE, MASSACHUSETTS**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	122		70-130
Toluene-d8	90		70-130
4-Bromofluorobenzene	85		70-130
Dibromofluoromethane	103		70-130

June 25, 2025
Project No. 04516-3

ITS Realty, LLC
87 Baker Street
Belmont, MA 02478

**Re: Groundwater Sampling Results
120 Washington Street
Somerville, Massachusetts**

To Whom It May Concern:

On behalf of UniFirst Corporation, GEI Consultants, Inc. is providing results of the groundwater sampling conducted at 120 Washington Street on April 22, 2025. The sampling was conducted as part of our investigation related to the site at 50 Tufts Street in Somerville, Massachusetts. We collected groundwater samples from monitoring wells MW117S, MW117T, and MW117D, located on your property.

The groundwater samples were submitted for chemical testing for volatile organic compounds (VOCs). We have attached a summary table of the chemicals detected in the groundwater samples along with the previous sampling results, and the laboratory data sheets for the recent sampling.

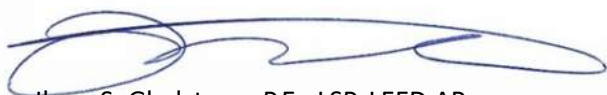
Thank you for permitting GEI to conduct groundwater sampling at your property.

Individuals and public officials may request additional public involvement activities under the Massachusetts Contingency Plan (MCP; 310 CMR 40.1403(10) and 40.1404). The property owner may also request additional documentation, such as that listed at 310 CMR 40.0017(3), associated with the above-referenced samples. We will provide such additional documentation within 30 days of our receipt of such a request.

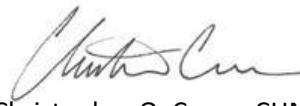
We appreciate your continued cooperation throughout the sampling process. If you have any immediate questions regarding the water testing results, please do not hesitate to contact me at 781 721-4012 or igladstone@geiconsultants.com.

Sincerely,

GEI CONSULTANTS, INC.



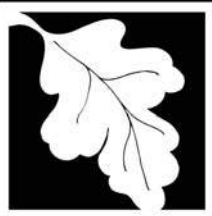
Ileen S. Gladstone, P.E., LSP, LEED AP
Senior Vice President



Christopher O. Coner, CHMM
Project Manager

Enclosures

cc: Catherine Malagrida, UniFirst Corporation
MassDEP-NERO (as part of Status Report)



**Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup**

BWSC123

This Notice is Related to:
Release Tracking Number

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

3 - 23246

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: 50 Tufts Street
City/Town: Somerville Zip Code: 02145-4129

B. This notice is being provided to the following party:

1. Name: ITS Realty LLC
2. Street Address: 87 Baker Street
City/Town: Belmont, MA Zip Code: 02478

C. This notice is being given to inform its recipient (the party listed in Section B):

- ☒ 1. That environmental sampling ~~will be~~/has been conducted at property owned by the recipient of this notice.
- ☒ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.
- ☒ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling ~~will be~~/has been conducted:

1. Street Address: 120 Washington Street
City/Town: Somerville, MA Zip Code: 02143
2. MCP phase of work during which the sampling ~~will be~~/has been conducted:
- | | |
|---|--|
| ☐ Immediate Response Action | ☐ Phase III Feasibility Evaluation |
| ☐ Release Abatement Measure | ☐ Phase IV Remedy Implementation Plan |
| ☐ Utility-related Abatement Measure | ☒ Phase V/Remedy Operation Status |
| ☐ Phase I Initial Site Investigation | ☐ Post-Temporary Solution Operation, Maintenance and Monitoring |
| ☐ Phase II Comprehensive Site Assessment | ☐ Other _____ |
- (specify)
3. Description of property where sampling ~~will be~~/has been conducted:
- ☐ residential ☒ commercial ☐ industrial ☐ school/playground ☒ Other parking lot
- (specify)
4. Description of the sampling locations and types (e.g., soil, groundwater, indoor air, soil gas) to the extent known at the time of this notice.

Annual Groundwater Sampling

E. Contact information related to the party providing this notice:

Contact Name: Ileen Gladstone, P.E., LSP, LEED AP
Street Address: GEI Consultants, Inc., 400 Unicorn Park Drive
City/Town: Woburn, MA Zip Code: 01801-3341
Telephone: (781) 721-4012 Email: igladstone@geiconsultants.com



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

3 - 23246

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation of a release for which a notification to MassDEP has been made under the Massachusetts Contingency Plan (310 CMR 40.0300) on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at <http://www.mass.gov/eea/agencies/massdep/cleanup>. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See <http://public.dep.state.ma.us/SearchableSites2/Search.aspx> to view site-specific files on-line or <http://mass.gov/eea/agencies/massdep/about/contacts/conduct-a-file-review.html> if you would like to make an appointment to see these files in person. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Chemical Testing Results - GEI Groundwater Sampling
50 Tufts Street
Somerville, Massachusetts

Sample Location: Sample Name: Well Screen Interval (ft bgs): Sample Date: Collected By:					MW117D	MW117D	MW117D	MW117D	MW117D	MW117D	MW117D	MW117D	MW117D	MW117D	MW117D	MW117D	MW117D	MW117D	MW117D	MW117D	MW117D	MW117D	MW117D	MW117D	MW117D	MW117D	MW117D	MW117D	MW117D			
					MW117D	MW117D	MW117D	MW117D	MW117D	MW117D	MW117D	MW117D	MW117D	MW117D	MW117D	MW117D	MW117D	MW117D	MW117D	MW117D	MW117D	MW117D	MW117D	MW117D	MW117D	MW117D	MW117D	MW117D	MW117D	MW117D	MW117D	MW117D
					60 to 70	60 to 70	60 to 70	60 to 70	60 to 70	60 to 70	60 to 70	60 to 70	60 to 70	60 to 70	60 to 70	60 to 70	60 to 70	60 to 70	60 to 70	60 to 70	60 to 70	60 to 70	60 to 70	60 to 70	60 to 70	60 to 70	60 to 70	60 to 70	60 to 70	60 to 70	60 to 70	60 to 70
					GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI
Analyte	Method	Units	Method 1 GW-2 Standard	Method 1 GW-3 Standard																												
Volatile Organic Compounds (VOCs)					8260	µg/l																										
Acetone			50000	50000	NT	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0 J+	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 10	< 10	< 10	<10	<10	<10	<10	<10	<5.0	<5.0	5.8	<5.0	<5.0	<5.0	
Benzene			1000	10000	NT	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	<0.50	<0.50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.50	
Bromodichloromethane			6	50000	NT	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
2-Butanone (MEK)			50000	50000	NT	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	<10	<10	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0		
Carbon disulfide			NS	NS	NT	< 5.0	< 5.0	6.5	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	
Carbon tetrachloride			2	5000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Chlorobenzene			200	1000	NT	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
Chloroethane			NS	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	
Chloroform			50	20000	NT	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	2.0	0.43 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Chloromethane			NS	NS	NT	< 2.0	< 2.0	< 2.0 J+	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	
1,4-Dichlorobenzene			60	8000	NT	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
1,1-Dichloroethane			2000	20000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
1,2-Dichloroethane			5	20000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	
1,1-Dichloroethylene			80	30000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
cis-1,2-Dichloroethylene			20	50000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
trans-1,2-Dichloroethylene			90	50000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
1,2-Dichloropropane			3	50000	NT	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dioxane			5000	50000	NT	< 25	< 25	< 25	< 25	< 25	< 25 J+	< 25 J+	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 130	< 130	< 130	< 250	< 250	< 250	< 250	< 250	< 250	< 250	< 250	
Ethylbenzene			20000	5000	NT	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
2-Hexanone			NS	NS	NT	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	
4-Isopropyltoluene			NS	NS	NT	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	
Methyl tert-butyl ether			50000	50000	NT	1.6	2.3	1.5	< 1.0	1.5	0.96 J	0.86 J	1.3	1.5	1.2	< 1.0	< 1.0	6.8	< 1.0	< 1.0	0.66 J	1.3	< 1.0	1.4	2	2	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Methylene chloride			2000	50000	NT	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0</										

- General Notes:**
- Analytes detected in at least one sample are reported here. For a complete list of analytes refer to the laboratory data reports.
 - ft bgs = feet below ground surface.
 - µg/l = micrograms per liter.
 - "< " = The analyte was not detected at a concentration above the specified reporting.
 - SHA = Sanborn Head & Associates.
 - FD = Field Duplicate Sample.
 - NT = Not Tested.
 - * = micrograms CaCO3 per liter

- Qualifying Notes:**
- B The analyte found in associated method blank.
 - C+ The result has a high bias due to surrogate recovery above upper control limits.
 - E The value exceeds the calibration range.
 - F+ The result has a high bias due to matrix spike recovery above upper control limits.
 - F- The result has a low bias due to matrix spike recovery below lower control limits.
 - G The result is estimated due to duplicate precision outside control limits.
 - J The reported result is below the laboratory reporting limit and is estimated.
 - J+ The reported result is estimated.
 - K- The result has a low bias due to blank spike or laboratory control sample recovery below lower control limits.
 - K+ The result has a high bias due to blank spike or laboratory control sample recovery above upper control limits.
 - R The result is rejected due to gross exceedence of minimum response factor criteria.

Chemical Testing Results - GEI Groundwater Sampling
50 Tufts Street
Somerville, Massachusetts

Sample Location:					MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	
Sample Name:					MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S	MW117S
Well Screen Interval (ft bgs):					5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	
Sample Date:					7/18/07	10/15/07	1/11/08	4/16/08	7/16/08	10/21/08	1/13/09	4/14/09	7/15/09	10/14/09	4/13/10	4/21/11	4/16/12	4/24/13	5/1/14	4/2/15	4/27/16	4/17/17	4/3/18	4/15/19	4/16/20	4/13/21	4/12/22	4/17/23	4/2/24	4/22/25	
Collected By:					GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI
Analyte	Method	Units	Method 1 GW-2 Standard	Method 1 GW-3 Standard																											
Volatile Organic Compounds (VOCs)					8260	µg/l																									
Acetone			50000	50000	NT	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0 J+	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10		
Benzene			1000	10000	NT	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	
Bromodichloromethane			6	50000	NT	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0		
2-Butanone (MEK)			50000	50000	NT	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 10	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0		
Carbon disulfide			NS	NS	NT	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0		
Carbon tetrachloride			2	5000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0		
Chlorobenzene			200	1000	NT	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0		
Chloroethane			NS	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0		
Chloroform			50	20000	NT	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0		
Chloromethane			NS	NS	NT	< 2.0	< 2.0	< 2.0 J+	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0		
1,4-Dichlorobenzene			60	8000	NT	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0		
1,1-Dichloroethane			2000	20000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0		
1,2-Dichloroethane			5	20000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0		
1,1-Dichloroethylene			80	30000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0		
cis-1,2-Dichloroethylene			20	50000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0		
trans-1,2-Dichloroethylene			90	50000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0		
1,2-Dichloropropane			3	50000	NT	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0		
1,4-Dioxane			5000	50000	NT	< 25	< 25	< 25	< 25	< 25	< 25 J+	< 25 J+	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 130	< 130	< 130	< 250	< 250	< 250	< 250	< 250	< 250		
Ethylbenzene			20000	5000	NT	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0					

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes refer to the laboratory data reports.
2. ft bgs = feet below ground surface.
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Qualifying Notes:

- A The analyte found in associated method blank.
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- E The value exceeds the calibration range.
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- J The reported result is below the laboratory reporting limit and is estimated.
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Chemical Testing Results - GEI Groundwater Sampling
50 Tufts Street
Somerville, Massachusetts

Sample Location:					MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	
Sample Name:					MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T	MW117T
Well Screen Interval (ft bgs):					35 to 45	35 to 45	35 to 45	35 to 45	35 to 45	35 to 45	35 to 45	35 to 45	35 to 45	35 to 45	35 to 45	35 to 45	35 to 45	35 to 45	35 to 45	35 to 45	35 to 45	35 to 45	35 to 45	35 to 45	35 to 45	35 to 45	35 to 45	35 to 45	35 to 45	
Sample Date:					7/19/07	10/11/07	1/15/08	4/16/08	7/16/08	10/21/08	1/13/09	4/14/09	7/15/09	10/16/09	4/13/10	4/21/11	4/16/12	4/23/13	5/1/14	4/2/15	4/27/16	4/17/17	4/3/18	4/15/19	4/16/20	4/13/21	4/12/22	4/17/23	4/2/24	4/22/25
Collected By:					GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI
Analyte	Method	Units	Method 1 GW-2 Standard	Method 1 GW-3 Standard																										
Volatile Organic Compounds (VOCs)					8260	µg/l																								
Acetone			50000	50000	NT	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0 J+	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0 K-	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	
Benzene			1000	10000	NT	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	
Bromodichloromethane			6	50000	NT	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
2-Butanone (MEK)			50000	50000	NT	< 5.0	< 5.0	< 5.0 J+	< 5.0	< 5.0	< 5.0	< 5.0 J+	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 10	< 10	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	
Carbon disulfide			NS	NS	NT	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	
Carbon tetrachloride			2	5000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Chlorobenzene			200	1000	NT	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Chloroethane			NS	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	
Chloroform			50	20000	NT	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Chloromethane			NS	NS	NT	< 2.0	< 2.0	< 2.0 J+	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	
1,4-Dichlorobenzene			60	8000	NT	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
1,1-Dichloroethane			2000	20000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
1,2-Dichloroethane			5	20000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
1,1-Dichloroethylene			80	30000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
cis-1,2-Dichloroethylene			20	50000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
trans-1,2-Dichloroethylene			90	50000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
1,2-Dichloropropane			3	50000	NT	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
1,4-Dioxane			5000	50000	NT	< 25	< 25	< 25	< 25	< 25	< 25 J+	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 50	< 25	< 25	< 25	< 130	< 130	< 130	< 250	< 250	< 250	< 250	
Ethylbenzene			20000	5000	NT	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
2-Hexanone			NS	NS	NT	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	
4-Isopropyltoluene			NS	NS	NT	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	
Methyl tert-butyl ether			50000	50000	NT	3.4	9.8	4.8	1.7	2.8	1.9	4.1	1.5	7.0	1.6	1.4	< 1.0 K-	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	
Methylene chloride			2000	50000	NT	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	
Naphthalene			700	20000	NT	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	
Tert-amyl methyl ether			NS	NS	NT	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	
1,1,1,2-Tetrachloroethane			10	50000	NT	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Tetrachloroethylene (PCE)			20	30000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Tetrahydrofuran			NS	NS	NT	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	
Toluene			50000	40000	NT	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
1,1,1-Trichloroethane (TCA)			4000	20000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
1,1,2-Trichloroethane			900	50000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Trichloroethylene (TCE)			5	5000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Vinyl chloride			2	50000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
m,p-Xylene			3000	5000	NT	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	
o-Xylene			3000	5000	NT	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0											

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes refer to the laboratory data reports.
2. ft bgs = feet below ground surface.
3. µg/l = micrograms per liter.
4. "<" = The analyte was not detected at a concentration above the specified reporting.
5. SHA = Sanborn Head & Associates.
6. FD = Field Duplicate Sample.
7. NT = Not Tested.
8. * = micrograms CaCO3 per liter

Qualifying Notes:

- A The analyte found in associated method blank.
- C+ The result has a high bias due to surrogate recovery above upper control limits.
- E The value exceeds the calibration range.
- F+ The result has a high bias due to matrix spike recovery above upper control limits.
- F- The result has a low bias due to matrix spike recovery below lower control limits.
- G The result is estimated due to duplicate precision outside control limits.
- J The reported result is below the laboratory reporting limit and is estimated.
- J+ The reported result is estimated.
- K- The result has a low bias due to blank spike or laboratory control sample recovery below lower control limits.
- K+ The result has a high bias due to blank spike or laboratory control sample recovery above upper control limits.
- R The result is rejected due to gross exceedence of minimum response factor criteria.

Project Name: TUFTS STREET**Lab Number:** L2524947**Project Number:** 045163**Report Date:** 05/06/25**SAMPLE RESULTS**

Lab ID: L2524947-01
 Client ID: 045163-MW117D
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 08:55
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 141,8260D
 Analytical Date: 05/01/25 14:33
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2524947**Project Number:** 045163**Report Date:** 05/06/25**SAMPLE RESULTS**

Lab ID: L2524947-01
 Client ID: 045163-MW117D
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 08:55
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2524947**Project Number:** 045163**Report Date:** 05/06/25**SAMPLE RESULTS**

Lab ID: L2524947-01
 Client ID: 045163-MW117D
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 08:55
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	115		70-130

Project Name: TUFTS STREET**Lab Number:** L2524947**Project Number:** 045163**Report Date:** 05/06/25**SAMPLE RESULTS**

Lab ID: L2524947-02
 Client ID: 045163-MW117S
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 09:30
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 141,8260D
 Analytical Date: 05/01/25 15:00
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2524947**Project Number:** 045163**Report Date:** 05/06/25**SAMPLE RESULTS**

Lab ID: L2524947-02
 Client ID: 045163-MW117S
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 09:30
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2524947**Project Number:** 045163**Report Date:** 05/06/25**SAMPLE RESULTS**

Lab ID: L2524947-02
 Client ID: 045163-MW117S
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 09:30
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	115		70-130

Project Name: TUFTS STREET**Lab Number:** L2524947**Project Number:** 045163**Report Date:** 05/06/25**SAMPLE RESULTS**

Lab ID: L2524947-03
 Client ID: 045163-MW117T
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 10:20
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 141,8260D
 Analytical Date: 05/01/25 15:26
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2524947**Project Number:** 045163**Report Date:** 05/06/25**SAMPLE RESULTS**

Lab ID: L2524947-03
 Client ID: 045163-MW117T
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 10:20
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2524947**Project Number:** 045163**Report Date:** 05/06/25**SAMPLE RESULTS**

Lab ID: L2524947-03
 Client ID: 045163-MW117T
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 10:20
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	120		70-130



Consulting
Engineers and
Scientists

January 14, 2025
Project 04516-3

CERTIFIED MAIL 9171 9690 0935 0204 6583 87

Xinjian Qiao, Trustee
46 Gibson Street
Medford, MA 02155-4831

Dear Mr. Qiao:

**Re: Annual EPMM Inspection
4 Morton Street
Somerville, Massachusetts**

On behalf of UniFirst Corporation, I am writing to request access to your property at 4 Morton Street to perform the annual inspection of the exposure pathway mitigation measure (EPMM) installed in the basement. We previously sent a letter on August 16, 2022, March 13, 2023, August 16, 2023, October 9, 2023, and January 24, 2024.

The EPMM consists of a sub-slab vapor barrier, ventilation piping with extraction points beneath the basement slab, and sealing the basement floor and the below grade portion of the walls. The EPMM was installed to inhibit vapors from intruding through the building foundation. We typically inspect the EPMM annually to confirm that the components are intact and functioning as intended.

Please contact Christopher Coner at 781-721-4135 or cconer@geiconsultants.com, to schedule the annual EPMM inspection of the basement, if you have any questions, or would like additional information.

Our records indicate that your preferred method for scheduling EPMM inspections was by email at qiaox2001@yahoo.com and your home and work numbers were 617-905-5158 and 781-839-1765, respectively. It appears that the home and work phone numbers we have for you are no longer working numbers and we received no response to our email. Please inform me if you have an alternative phone number or email for scheduling future EPMM inspections.

Sincerely,

GEI CONSULTANTS, INC.

A blue ink signature of Ileen S. Gladstone, consisting of a large, stylized 'G' followed by a horizontal line.

Ileen S. Gladstone, P.E., LSP
Senior Vice President

A blue ink signature of Christopher Coner, written in a cursive style.

Christopher Coner, CHMM
Project Manager

MEF/CC/ISG:jam

c: Catherine Malagrida, UniFirst Corporation
MassDEP via Status Report



Consulting April 10, 2025
Engineers and Project 04516-3
Scientists

CERTIFIED MAIL 9171 9690 0935 0204 6583 94

Shelly Calder
Milton Yarberry
84 Franklin Street, Unit 3
Somerville, MA 02145

Dear Ms. Calder and Mr. Yarberry:

**Re: Request to Conduct Environmental Sampling
84-86 Franklin Street, Unit 3
Somerville, Massachusetts**

The purpose of this letter is to inform you about the environmental conditions in the vicinity of your property located at 84-86 Franklin Street, Unit 3 in Somerville, Massachusetts and to request access to conduct environmental sampling. The sampling would include sub-slab soil vapor and indoor air testing. Contamination is originating from the property located at 50 Tufts Street.

A release of chlorinated volatile organic compounds (VOCs) to soil and groundwater on the 50 Tufts Street Property was first reported to the Massachusetts Department of Environmental Protection (MassDEP) in 2002. Numerous studies have been conducted relating to the 50 Tufts Street Site, and response actions are currently being conducted under the Massachusetts Contingency Plan (MCP) process. Reports documenting response actions conducted at the Site are available for review at the MassDEP Northeast Regional Office in Woburn, Massachusetts. Records are accessible online at the MassDEP Searchable Sites database (<https://eeaonline.eea.state.ma.us/portal#!/search/wastesite>). Additionally, local public document repositories have been established at the Somerville Central Public Library and at the City of Somerville Clerk's Office. The MassDEP release tracking number (RTN) for the Site is RTN 3-23246. The 84-86 Franklin Street property is located within the boundaries of the Site (Fig. 1).

The boundaries of the Site were delineated based on the extent of dissolved concentrations of chlorinated VOCs in groundwater. All properties within the Site, including 84-86 Franklin Street, Unit 3, are serviced by municipal water. Therefore, there is limited potential for direct exposure to contamination in groundwater for human receptors within the Site. Because they are volatile, VOCs have the potential to migrate from subsurface soils or groundwater into the indoor air of buildings. This is known as vapor intrusion.

GEI has conducted groundwater sampling throughout the neighborhood, including on Franklin Street and Franklin Avenue, since 2007. Additionally, GEI collected sub-slab soil vapor samples from 86 Franklin Street (now known as 84-86 Franklin Street, Unit 1 and Unit 2) in April 2007. GEI collected indoor air samples from 86 Franklin Street in June 2007, November 2007, and February 2008. The results of the testing indicated that the groundwater contamination had not affected the indoor air of 86 Franklin Street.

Ms.Shelly Calder
Mr. Milton Yarberry

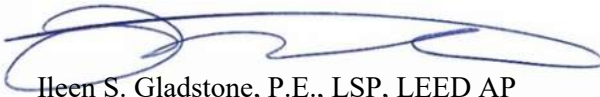
- 2 -

April 10, 2025

GEI would like to conduct similar soil vapor and indoor air testing at your property at no expense to you. Please contact me at igladstone@geiconsultants.com or 781-721-4012 to answer any of your questions and to coordinate access.

Sincerely,

GEI CONSULTANTS, INC.



Heen S. Gladstone, P.E., LSP, LEED AP
Senior Vice President

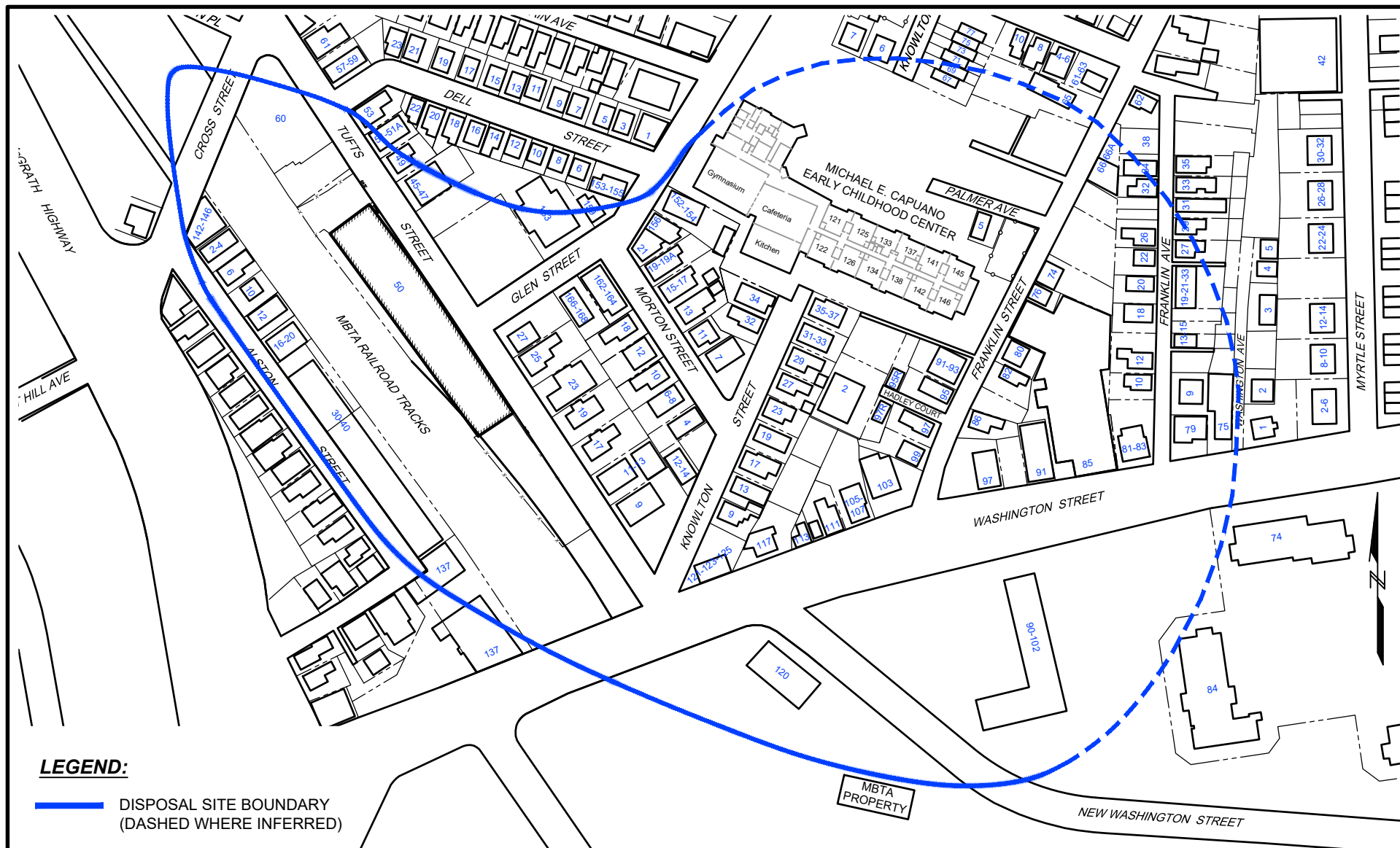


Christopher Coner, CHMM
Project Manager

MEF/COC:jam

Enclosure

c: Catherine Malagrida, UniFirst Corporation
MassDEP-NERO (via Status Report)



50 Tufts Street
 Somerville, Massachusetts

UniFirst Corporation
 Wilmington, Massachusetts



Project 04516-3

SITE SKETCH

June 2023

Fig . 1



Consulting March 18, 2025
Engineers and Project 04516-3
Scientists

CERTIFIED MAIL 9171 9690 0935 0204 6584 00

Mr. Juan Rivera
c/o Skyline Realty
196 Boston Avenue #2100
Medford, MA 02155

Dear Mr. Rivera:

**Re: Summary of Indoor Air Sampling and Environmental Conditions
95R Franklin Street
Somerville, Massachusetts**

The purpose of this letter is to summarize the environmental conditions at 95R Franklin Street in Somerville, Massachusetts associated with the release of chlorinated volatile organic compounds (VOCs) to soil and groundwater on the 50 Tufts Street Property.

A release of chlorinated VOCs on the 50 Tufts Street Property was first reported to the Massachusetts Department of Environmental Protection (MassDEP) in 2002. Numerous studies have been conducted relating to the 50 Tufts Street Site, and response actions are currently being conducted under the Massachusetts Contingency Plan (MCP) process. Reports documenting response actions conducted at the Site are available for review at the MassDEP Northeast Regional Office in Woburn, Massachusetts. Records are accessible online at the MassDEP Searchable Sites database (<https://eeaonline.eea.state.ma.us/portal#!/search/wastesite>). Additionally, local public document repositories have been established at the Somerville Central Public Library and at the City of Somerville Clerk's Office. The MassDEP release tracking number (RTN) for the Site is RTN 3-23246. The 95R Franklin Street property is located within the boundaries of the Site (Fig. 1).

The boundaries of the Site were delineated based on the extent of dissolved concentrations of chlorinated VOCs in groundwater. All properties within the Site, including 95R Franklin Street, are serviced by municipal water. Therefore, there is limited potential for direct exposure to contamination in groundwater for human receptors within the Site. Because they are volatile, VOCs have the potential to migrate from subsurface soils or groundwater into the indoor air of buildings. This is known as vapor intrusion.

GEI collected a sub-slab soil vapor sample from beneath the building in March 2007. Based on the soil vapor sampling results, an exposure pathway mitigation measure (EPMM) was recommended. Installation of the EPMM was completed in December 2007. The EPMM consists of a venting system beneath the basement floor, and an epoxy vapor barrier system on the basement walls. Soil vapor beneath the building is captured via multiple extraction pipes installed beneath the concrete floor in the basement. The soil vapor is re-routed from beneath the slab to the atmosphere via exterior piping that extends vertically above the roofline.

Following the installation of the EPMM, GEI collected indoor air samples from the basement and first floor in December 2007, April 2009, and March 2010. We have attached a summary table of the indoor air sampling results.

The indoor air sampling results confirmed that the EPMM was functioning properly and demonstrated that there is a condition of "No Significant Risk" to occupants of the building at 95R Franklin Street. No Significant Risk is a standard established in the MCP to demonstrate that exposure to residual contamination will not result in unacceptable risks to human health based on regulatory thresholds.

Following installation of the EPMM, the owner of 95R Franklin Street executed a Notice of Activity and Use Limitation ("AUL") that was recorded in the Middlesex South Registry of Deeds on October 23, 2009. An AUL is a document that provides information to current and future property owners and other interested parties about (1) the nature and extent of contamination on the property, (2) the appropriateness of certain uses and activities on the property, and (3) a property owner's obligations to ensure that the requirements of the AUL continue to be met.

In order to maintain a condition of No Significant Risk, the AUL for 95R Franklin Street requires that the EPMM be inspected at least annually to confirm that it is functioning properly. Specific requirements to preserve the EPMM are detailed in the AUL. A copy of the AUL is enclosed with this letter.

GEI on behalf of UniFirst Corporation would like to schedule a time to access the Property to maintain, inspect, and monitor operation of the system. The inspection should take approximately 15 minutes and can be performed on a day and time that is convenient for you. Please contact me at igladstone@geiconsultants.com or 781-721-4012 to answer any of your questions and to coordinate access.

Sincerely,

GEI CONSULTANTS, INC.



Ileen S. Gladstone, P.E., LSP, LEED AP
Senior Vice President



Christopher Coner, CHMM
Senior Project Manager

MEF/COC/ISG:jam

Enclosures

c: Catherine Malagrida, UniFirst Corporation
MassDEP via Status Report

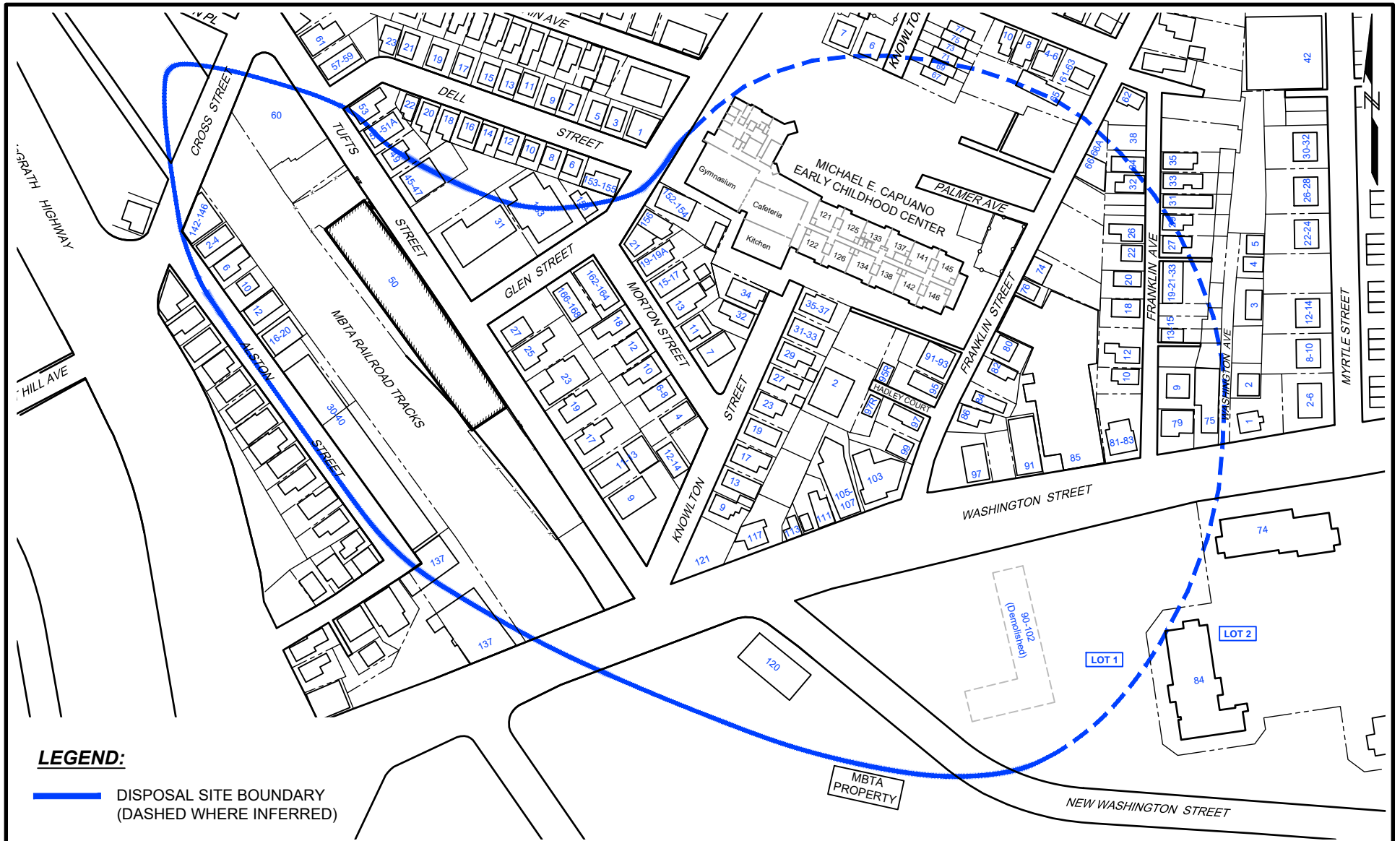


Table 1 - Chemical Testing Results -
Post-EPEM Installation Indoor Air
95R Franklin Street
Somerville, Massachusetts

		95R Franklin Street									
		95R FRANK-B2		95RFRANK-1		95RFran-1A		95RFran-B2		95R Frank-1	
		11/15/07		11/15/07		12/23/07		12/23/07		12/28/07	
Units:		µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
Analyte	Method										
Volatile Organic Compounds (VOCs)	TO-15										
Carbon tetrachloride		0.63 J	0.10 J	0.61 J	0.097 J	0.58 J	0.092 J	< 1.3	< 0.20	0.62 J	0.098 J
1,2-Dichloroethane (DCA)		< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20
Tetrachloroethylene (PCE)		1.3 J	0.19 J	1.3 J	0.19 J	1.0 J	0.15 J	< 1.4	< 0.20	1.1 J	0.16 J

General Notes:

1. Analytes detected in at least one sample are reported here.
For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. "<" = The analyte was not detected at a concentration above the specified laboratory reporting limit.
5. The samples collected in March 2010 were collected over a 24-hour period from March 8 through 9, 2010.

Qualifying Note:

- J The reported result is below the laboratory reporting limit and is estimated.

Table 1 - Chemical Testing Results -
Post-EPEM Installation Indoor Air
95R Franklin Street
Somerville, Massachusetts

Sample Location: Sample Name: Sample Date: Units:		95R Franklin Street (continued)									
		95R Frank-B 12/28/07		95RFRANK-1 4/3/09		95RFRANK-B 4/3/09		95RFRANK-1 3/9/10		95RFRANK-B 3/9/10	
		µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
Analyte	Method										
Volatile Organic Compounds (VOCs)	TO-15										
Carbon tetrachloride		< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20
1,2-Dichloroethane (DCA)		< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	1.1	0.26	< 0.81	< 0.20
Tetrachloroethylene (PCE)		1.1 J	0.16 J	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20

General Notes:

1. Analytes detected in at least one sample are reported here.
For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. "<" = The analyte was not detected at a concentration above the specified laboratory reporting limit.
5. The samples collected in March 2010 were collected over a 24-hour period from March 8 through 9, 2010.

Qualifying Note:

- J The reported result is below the laboratory reporting limit and is estimated.



Bk: 53716 Pg: 320 Doc: NOT
Page: 1 of 21 10/23/2009 11:21 AM

Form 1075

NOTICE OF ACTIVITY AND USE LIMITATION

M.G.L. c. 21E, § 6 and 310 CMR 40.0000

Disposal Site Name: 50 Tufts Street, Somerville, Massachusetts
DEP Release Tracking No. (s): 3-23246

This Notice of Activity and Use Limitation ("Notice") is made as of this 23rd day of October, 2009, by Michael T. Fleming as Trustee of the 95R Franklin Street Nominee Trust, c/o Marsh, Moriarty, Ontell, & Golder, PC, 18 Tremont Street, Boston, Massachusetts, together with his successors and assigns (collectively "Owner").

WITNESSETH:

WHEREAS, Michael T. Fleming as Trustee of the 95R Franklin Street Nominee Trust is the owner in fee simple of that certain parcel of land located at 95R Franklin Street in Somerville, Middlesex County, Massachusetts with the buildings and improvements thereon, pursuant to a deed recorded with the Middlesex South District Registry of Deeds in Book 50978, Page 526;

WHEREAS, said parcel of land, which is more particularly bounded and described in Exhibit A, attached hereto and made a part hereof ("Property"), is subject to this Notice of Activity and Use Limitation. The Property is shown on a plan recorded in the Middlesex South District Registry of Deeds in Plan Book 298, Plan 35;

WHEREAS, the Property comprises part of a disposal site as the result of a release of oil and/or hazardous material. Exhibit B is a sketch plan showing the relationship of the Property subject to this Notice of Activity and Use Limitation to the boundaries of said disposal site existing within the limits of the Property and to the extent such boundaries have been established. Exhibit B is attached hereto and made a part hereof; and

WHEREAS, one or more response actions have been selected for a Portion of the Disposal Site in accordance with M.G.L. c. 21E ("Chapter 21E") and the Massachusetts Contingency Plan, 310 CMR 40.0000 ("MCP"). Said response actions are based upon (a) the restriction of human access to and contact with oil and/or hazardous material in soil and/or (b) the restriction of certain activities occurring in, on, through, over, or under the Property. The basis for such restrictions is set forth in an Activity and Use Limitation Opinion ("AUL Opinion"), dated OCTOBER 5, 2009, (which is attached hereto as Exhibit C and made a part hereof);

NOW, THEREFORE, notice is hereby given that the activity and use limitations set forth in said AUL Opinion are as follows:

1. Activities and Uses Consistent with the AUL Opinion. The AUL Opinion provides that a condition of No Significant Risk to health, safety, public welfare, or the environment exists for any foreseeable period of time (pursuant to 310 CMR 40.0000) if the following activities and uses occur on the Property:

50 TUFTS STREET, SOMERVILLE
95R FRANKLIN STREET, SOMERVILLE

00205403

Form 1075

Notice Of Activity And Use Limitation

M.G.L. c. 21E, § 6 and 310 CMR 40.0000

Page 2 of 6

- (i) Any use of the existing building located on the Property, including use of the building as a residence, so long as the vapor barrier and venting system comprising the Exposure Pathway Elimination Measure ("EPEM") are maintained and, if an electric fan is added to the EPEM, such fan operates continuously;
- (ii) Activities and uses which are not identified by this Notice as being inconsistent with maintaining a condition of No Significant Risk;
- (iii) Such other activities or uses which, in the Opinion of an LSP, shall present no greater risk of harm to health, safety, public welfare, or the environment than the activities and uses set forth in this Paragraph; and
- (iv) Such other activities and uses not identified as being Activities and Uses Inconsistent with the AUL.

2. Activities and Uses Inconsistent with the AUL Opinion. Activities and uses which are inconsistent with the objectives of this Notice of Activity and Use Limitation, and which, if implemented at the Property, may result in a significant risk of harm to health, safety, public welfare, or the environment or in a substantial hazard, are as follows:

- (i) In the basement, removal or damage of the concrete floor, the overlying epoxy coating, the vapor barrier, the sub-slab venting system, and/or the protective stucco wall finish;
- (ii) In the basement, any activities which may damage and/or compromise the concrete floor, the overlying epoxy coating, the vapor barrier, the sub-slab venting system, and/or the protective stucco wall finish;
- (iii) In the crawlspace, removal or damage of the vapor transmission layer, vapor barrier, geotextile, and/or the peastone layer;
- (iv) In the crawlspace, any activities which may damage and/or compromise the vapor transmission layer, vapor barrier, geotextile, and/or the peastone layer;
- (v) In the event an electric fan is added to the EPEM, removal or damage of such fan;
- (vi) In the event an electric fan is added to the EPEM, shutting down, turning off, or removing electrical power to the fan, or any other activity that would make such fan inoperable;
- (vii) Any activities which may damage and/or compromise the ventilation piping located on the exterior of the building; and
- (viii) Construction of any occupied structure at the Property without the

installation of an EPEM and subsequent indoor air sampling to confirm its effectiveness in preventing or mitigating vapor intrusion into the structure.

3. Obligations and Conditions Set Forth in the AUL Opinion. Obligations and/or conditions to be undertaken and/or maintained at the Property to maintain a condition of No Significant Risk as set forth in the AUL Opinion shall include the following:

- (i) In the basement, the integrity of the concrete floor, the overlying epoxy floor coating, the vapor barrier, the sub-slab venting system, and the protective stucco wall finish of the existing building must be preserved and the elements of the EPEM must not be damaged or altered;
- (ii) In the crawlspace, the integrity of the vapor transmission layer, vapor barrier, geotextile, and peastone layer must be preserved and the elements of the EPEM must not be damaged or altered;
- (iii) On the exterior of the building, the integrity of the ventilation piping must be preserved, and the elements of the piping must not be damaged or altered;
- (iv) In the event an electric fan is added to the EPEM, power must be maintained to such fan and the fan may not be shut down;
- (v) In the event an electric fan is added to the EPEM, notification must be provided to UniFirst Corporation, together with its successors and assigns and/or its agents, if such fan becomes inoperable, and access must be provided to UniFirst Corporation, together with its successors and assigns and/or its agents, to repair or replace the fan as necessary;
- (vi) Access must be provided, at least annually, to UniFirst Corporation, together with its successors and assigns and/or its agents, to inspect the EPEM for damage and, to the extent necessary to continue the EPEM's effectiveness in preventing or mitigating vapor intrusion into the building, to conduct indoor air testing and/or repair or replace the vapor barrier, venting system, and/or electric fan (to the extent such a fan is added to the EPEM); and
- (vii) Any future construction of an occupied structure at the Property must include the installation of an EPEM to prevent or mitigate vapor intrusion into the structure. The design of the EPEM must be incorporated into the design and construction of the future structure and must be evaluated by an LSP. Follow-up indoor air testing must be conducted to confirm the effectiveness of the EPEM in preventing or mitigating vapor intrusion into the structure.

Form 1075

Notice Of Activity And Use Limitation

M.G.L. c. 21E, § 6 and 310 CMR 40.0000

Page 4 of 6

4. Proposed Changes in Activities and Uses. Any proposed changes in activities and uses at the Property which may result in higher levels of exposure to oil and/or hazardous material than currently exist shall be evaluated by an LSP who shall render an Opinion, in accordance with 310 CMR 40.1080 *et seq.*, as to whether the proposed changes will present a significant risk of harm to health, safety, public welfare, or the environment. Any and all requirements set forth in the Opinion to meet the objective of this Notice shall be satisfied before any such activity or use is commenced.

5. Violation of a Response Action Outcome. The activities, uses, and/or exposures upon which this Notice is based shall not change at any time to cause a significant risk of harm to health, safety, public welfare, or the environment or to create substantial hazards due to exposure to oil and/or hazardous material without the prior evaluation by an LSP in accordance with 310 CMR 40.1080 *et seq.*, and without additional response actions, if necessary, to achieve or maintain a condition of No Significant Risk or to eliminate substantial hazards.

If the activities, uses, and/or exposures upon which this Notice is based change without the prior evaluation and additional response actions determined to be necessary by an LSP in accordance with 310 CMR 40.1080 *et seq.*, the owner or operator of the Property subject to this Notice at the time that the activities, uses and/or exposures change, shall comply with the requirements set forth in 310 CMR 40.0020.

6. Incorporation Into Deeds, Mortgages, Leases, and Instruments of Transfer. This Notice shall be incorporated either in full or by reference into all future deeds, easements, mortgages, leases, licenses, occupancy agreements, or any other instrument of transfer, whereby an interest in and/or a right to use the Property or a portion thereof is conveyed.

Owner hereby authorizes and consents to the filing and recordation and/or registration of this Notice, said Notice to become effective when executed under seal by the undersigned LSP, and recorded and/or registered with the appropriate Registry(ies) of Deeds and/or Land Registration Office(s).

WITNESS the execution hereof under seal this 23rd day of September, 2009.



Michael T. Fleming, Trustee
95R Franklin Street Nominee Trust

Form 1075
 Notice Of Activity And Use Limitation
 M.G.L. c. 21E, § 6 and 310 CMR 40.0000
 Page 5 of 6

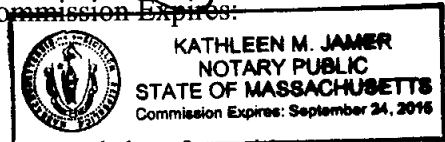
COMMONWEALTH OF MASSACHUSETTS

Middlesex, ss

_____, 2009

On this 23 day of September, 2009, before me, the undersigned notary public, personally appeared Michael Fleming, proved to me through satisfactory evidence of identification, which were MA. Driver License, to be the person whose name is signed on the preceding or attached document, and acknowledged to me that he signed it voluntarily for its stated purpose.

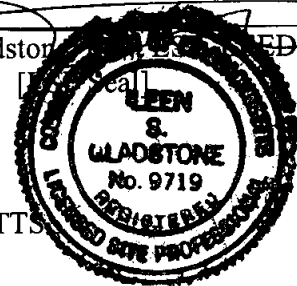
Kathleen M. Jamer
 Notary Public
 My Commission Expires:



The undersigned LSP hereby certifies that she executed the aforesaid Activity and Use Limitation Opinion attached hereto as Exhibit C and made a part hereof and that in her Opinion this Notice of Activity and Use Limitation is consistent with the terms set forth in said Activity and Use Limitation Opinion.

Date: 10/5/09

Ileen S. Gladstone



COMMONWEALTH OF MASSACHUSETTS

Middlesex, ss

_____, 2009

On this 5 day of October, 2009, before me, the undersigned notary public, personally appeared ILEEN GLADSTONE, proved to me through satisfactory evidence of identification, which were MA. DRIVER LICENSE, to be the person whose name is signed on the preceding or attached document, and acknowledged to me that he signed it voluntarily for its stated purpose.

Ileen S. Gladstone
 Notary Public
 My Commission Expires:

Form 1075
Notice Of Activity And Use Limitation
M.G.L. c. 21E, § 6 and 310 CMR 40.0000
Page 6 of 6

Upon recording, return to:

Michael T. Fleming, Trustee
95R Franklin Street Nominee Trust
c/o Marsh, Moriarty, Ontell, & Golder, PC
Attn: Michael Marsh
18 Tremont Street
Boston, MA 02108-2301

Exhibit A

Metes and Bounds Description of AUL Area

Bk: 50978 Pg: 526



Bk: 60978 Pg: 526 Doc: DEED
Page: 1 of 2 04/02/2008 10:52 AM

QUITCLAIM DEED

I, Susan Southwick now know as Susan Lynn Warren-Southwick, of Somerville, Middlesex County, Massachusetts, for consideration of Two Hundred Ninety-Five Thousand (\$295,000.00) dollars paid, grant to Michael T. Fleming, Trustee of the 95R Franklin Street Nominee Trust under a Declaration of Trust dated March 31, 2008, recorded herewith, with an address of c/o Marsh Moriarty Ontell & Golder, PC, 18 Tremont Street, Boston, MA 02108, Attn: Michael Marsh

with QUITCLAIM COVENANTS

The land in Somerville, Middlesex County, Massachusetts, with the buildings thereon, being a portion of Lot 3 on a Plan of Land in Somerville, belonging to Walter M. Hadley, made by A.F. Sargent, Surv., dated June 21, 1918, and recorded with Middlesex South District Deeds in Book of Plans 298, Plan 35, bounded and described as follows:

NORTHWESTERLY	by land of Smith & Hopkins, 77.5 feet;
NORTHEASTERLY	by other land of said Smith & Hopkins, 22.5 feet;
SOUTHEASTERLY	by Lot 4 on said plan, 45 feet;
NORTHEASTERLY	by said Lot 4, 2.5 feet
SOUTHEASTERLY	by land now or formerly of George A. Hadley, 33.75 feet;
SOUTHWESTERLY	by a 16 foot passageway which is continuation of a way from Franklin Street as shown on said plan, with the privilege of passageway over and use of said continuation of the way for the convenience of the herein demised land for all purposes for which a passageway may be used in the City of Somerville.

Subject to a Grant of Remediation Easement and Restrictions from Susan Southwick and Melissa Warren to UniFirst dated January 28, 2008 and recorded March 14, 2008 at the Middlesex South Registry of Deeds in Book 50885, Page 228.

Subject to a right of passageway and continuation of passageway for all purposes for which a passageway may be used in the City of Somerville as shown on a Plan of Land recorded in the Middlesex South Registry of Deeds in Plan Book 298, Page 35.

Meaning and intending to describe and convey the premises conveyed by deed dated July 15, 1997 recorded in the Middlesex South District Registry of Deeds in Book 27524, Page 258.

MASSACHUSETTS EXCISE TAX
Southern Middlesex District ROD # 001
Date: 04/02/2008 10:52 AM
Ctd# 108810 11672 Doc# 00063280
Fee: \$1,245.20 Cons: \$295,000.00

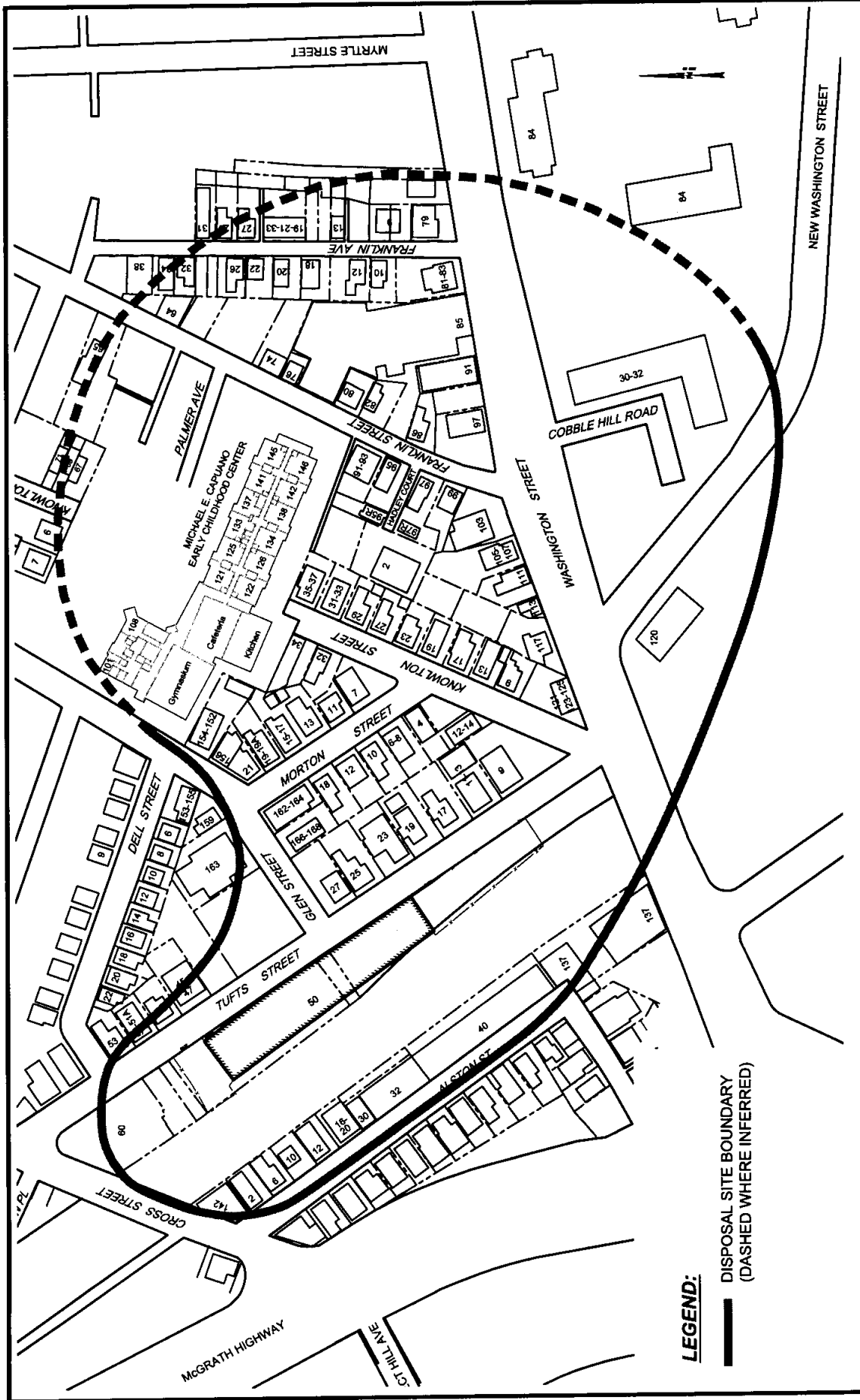
LIBD/209077/1.2 LEK

04/01/2008 9:46 AM

Address of Property: 95R Franklin Street, Somerville, Massachusetts 02143
Address of Grantee: c/o Marsh, Moriarty Ontell & Golder, PC, 18 Tremont Street, Boston, MA 02108, Attn: Michael Marsh

Exhibit B

Sketch Plan of Disposal Site Boundary (Exhibit B-1)
Sketch Plan of AUL Area (Exhibit B-2)



LEGEND:

— DISPOSAL SITE BOUNDARY
 - - - (DASHED WHERE INFERRED)



Activity and Use Limitation
 50 Tufts Street
 Somerville, Massachusetts
 UniFirst Corporation
 Wilmington, Massachusetts



SITE SKETCH

Project 04516-3
 September 2009
 Exhibit B-1



SITE SKETCH

Activity and Use Limitation

50 Tufts Street

Somerville, Massachusetts

UniFirst Corporation

Wilmington, Massachusetts

September 2009

Exhibit B-2

Project 04516-3

N:\04516\Drafting\04516-3\AULs\045163 - 95R Franklin

Exhibit C

LSP AUL Opinion



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC113A

ACTIVITY & USE LIMITATION (AUL) OPINION FORM

Pursuant to 310 CMR 40.1056 & 40.1070 - 40.1084 (Subpart J)

Release Tracking Number

3

-

23246

A. DISPOSAL SITE LOCATION:

1. Disposal Site Name: **50 TUFTS ST & PROP ACROSS THE ST**

2. Street Address: **50 TUFTS ST**

3. City/Town: **SOMERVILLE**

4. ZIP Code: **02145-4129**

B. THIS FORM IS BEING USED TO: (check one)

- ☒ 1. Provide the LSP Opinion for a **Notice of Activity and Use Limitation**, pursuant to 310 CMR 40.1074.
- ☐ 2. Provide the LSP Opinion for an **Evaluation of Changes in Land Uses/Activities and/or Site Conditions after a Response Action Outcome Statement**, pursuant to 310 CMR 40.1080. Include BWSC113A as an attachment to BWSC113. Section A and C do not need to be completed.
- ☐ 3. Provide the LSP Opinion for an **Amended Notice of Activity and Use Limitation**, pursuant to 310 CMR 40.1081(4).
- ☐ 4. Provide the LSP Opinion for a **Partial Termination of a Notice of Activity and Use Limitation**, pursuant to 310 CMR 40.1083(3).
- ☐ 5. Provide the LSP Opinion for a **Termination of a Notice of Activity and Use Limitation**, pursuant to 310 CMR 40.1083(1)(d).
- ☐ 6. Provide the LSP Opinion for a **Grant of Environmental Restriction**, pursuant to 310 CMR 40.1071.
- ☐ 7. Provide the LSP Opinion for an **Amendment of a Grant of Environmental Restriction**, pursuant to 310 CMR 40.1081(3).
- ☐ 8. Provide the LSP Opinion for a **Partial Release of a Grant of Environmental Restriction**, pursuant to 310 CMR 40.1083(2).
- ☐ 9. Provide the LSP Opinion for a **Release of a Grant of Environmental Restriction**, pursuant to 310 CMR 40.1083(1)(c).
- ☐ 10. Provide the LSP Opinion for a **Confirmatory Activity and Use Limitation**, pursuant to 310 CMR 40.1085(4).

(Unless otherwise noted above, all sections of this form (BWSC113A) must be completely filled out, printed, stamped, signed with black ink and attached as an exhibit to the AUL Document to be recorded and/or registered with the Registry of Deeds and/or Land Registration Office.)

C. AUL INFORMATION:

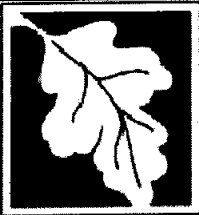
1. Is the address of the property subject to AUL different from the disposal site address listed above?

☐ a. No ☒ b. Yes If yes, then fill out address section below.

2. Street Address: **95R FRANKLIN STREET**

3. City/Town: **SOMERVILLE**

4. ZIP Code: **02145-4230**



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC113A

ACTIVITY & USE LIMITATION (AUL) OPINION FORM

Release Tracking Number

Pursuant to 310 CMR 40.1056 & 40.1070 - 40.1084 (Subpart J)

3

-

23246

D. LSP SIGNATURE AND STAMP:

I attest under the pains and penalties of perjury that I have personally examined and am familiar with this transmittal form, including any and all documents accompanying this submittal. In my professional opinion and judgment based upon application of (i) the standard of care in 309 CMR 4.02(1), (ii) the applicable provisions of 309 CMR 4.02(2) and (3), and 309 CMR 4.03(2), and (iii) the provisions of 309 CMR 4.03(3), to the best of my knowledge, information and belief,

> if Section B indicates that a **Notice of Activity and Use Limitation** is being registered and/or recorded, the Activity and Use Limitation that is the subject of this submittal (i) is being provided in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (ii) complies with 310 CMR 40.1074;

> if Section B indicates that an **Evaluation of Changes in Land Uses/Activities and/or Site Conditions after a Response Action Outcome Statement** is being submitted, this evaluation was developed in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (ii) complies with 310 CMR 40.1080;

> if Section B indicates that an **Amended Notice of Activity and Use Limitation or Amendment to a Grant of Environmental Restriction** is being registered and/or recorded, the Activity and Use Limitation that is the subject of this submittal (i) is being provided in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (ii) complies with 40.1081;

> if Section B indicates that a **Termination or a Partial Termination of a Notice of Activity and Use Limitation, or a Release or Partial Release of a Grant of Environmental Restriction** is being registered and/or recorded, the Activity and Use Limitation that is the subject of this submittal (i) is being provided in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (ii) complies with 310 CMR 40.1083;

> if Section B indicates that a **Grant of Environmental Restriction** is being registered and/or recorded, the Activity and Use Limitation that is the subject of this submittal (i) is being provided in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (ii) complies with 310 CMR 40.1071;

> if Section B indicates that a **Confirmatory Activity and Use Limitation** is being registered and/or recorded, the Activity and Use Limitation that is the subject of this submittal (i) is being provided in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (ii) complies with 310 CMR 40.1085(4);

I am aware that significant penalties may result, including, but not limited to, possible fines and imprisonment, if I submit information which I know to be false, inaccurate or materially incomplete.

1. LSP #: 9719

2. First Name: ILEEN S

3. Last Name: GLADSTONE

4. Telephone: (781) 721-4012

5. Ext.:

6. FAX:

7. Signature:

8. Date: 10/15/09
mm/dd/yyyy

9. LSP Stamp:

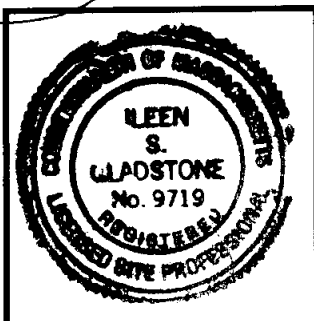


EXHIBIT C*OCTOBER 5*, 2009

Reference: Activity and Use Limitation Opinion
95R Franklin Street
Somerville, Massachusetts
DEP RTN 3-23246

Introduction

This Licensed Site Professional (LSP) Opinion for a Notice of Activity and Use Limitation (AUL) was prepared by GEI Consultants, Inc. (GEI) for the property located at 95R Franklin Street in Somerville, Massachusetts (the Property). The Property comprises a portion of the 50 Tufts Street disposal site (the Site) assigned Release Tracking Number (RTN) 3-23246 by the Massachusetts Department of Environmental Protection (DEP). In 2002, a historical release of chlorinated volatile organic compounds (VOCs) to soil and groundwater at the Site was reported to the DEP. Subsequent investigations at the Site identified chlorinated VOCs in indoor air at the Site, and in groundwater and indoor air at residential properties in the vicinity of the 50 Tufts Street property, including 95R Franklin Street. The Property and the 50 Tufts Street property are shown on Fig. 1. UniFirst Corporation of Wilmington, Massachusetts is conducting response actions at the Site.

This LSP Opinion was prepared in accordance with the Massachusetts Contingency Plan (MCP; 310 CMR 40.1074) and the DEP Guidance on Implementing AULs (May 1999). This AUL Opinion applies to the entire Property, as defined in Exhibit A and indicated on Exhibit B of the AUL.

This LSP Opinion provides the following information:

- Why an AUL is appropriate to achieve and/or maintain a condition of No Significant Risk;
- Activities and uses to be prohibited and/or limited;
- Activities and uses to be permitted; and
- Obligations and conditions necessary to meet the objectives of the AUL.

Background

The Property is located in a commercial/residential zoning district, fronts Hadley Court to the south, and is bounded by residential property to the east and west, and a parking area for the Capuano Early Childhood Center to the north. The Property is located within the Site boundary associated with a historic release of chlorinated volatile organic compounds (VOCs) to soil and groundwater at 50 Tufts Street, located southwest of the Property across Tufts Street. From approximately 1955 to approximately 2002, 50 Tufts Street was used for storage and distribution of industrial chemicals, laundry supplies, and dry cleaning supplies. Chemicals stored at and delivered to and from 50 Tufts Street included chlorinated solvents. These chlorinated VOCs – particularly tetrachloroethylene (PCE), trichloroethylene (TCE), and 1,1,1-trichloroethane (TCA) – have been detected in soil, soil vapor, indoor air, and groundwater at 50 Tufts Street.

Based on the results of assessments conducted to date, the Site includes the 50 Tufts Street property, together with portions of properties in the neighborhood to the east and west. Based on multiple rounds of groundwater measurements, the general direction of groundwater flow at the Site is to the northeast across Tufts Street towards Knowlton and Franklin Streets.

Based on groundwater, soil, soil vapor, and indoor air sampling results, GEI identified a several-block area near 50 Tufts Street for evaluation of vapor intrusion as a potential exposure pathway. The evaluation included a program of sub-slab soil vapor testing and indoor air testing. Indoor air testing at the Property indicated the presence of chlorinated VOCs, particularly PCE, and the likelihood of a complete vapor intrusion exposure pathway. The residence at the Property includes a basement and crawl space.

To eliminate or mitigate the exposure pathway, UniFirst Corporation installed an Exposure Pathway Elimination Measure (EPEM) at the Property. In the basement, the EPEM consists of a vapor trench installed around the perimeter of the basement floor and a vapor barrier system covering both the floor and the fieldstone foundation walls, together with a venting system beneath the vapor barrier. Sketches of the EPEM installed in the basement and crawl space are shown in Fig. 2.

Perforated polyvinyl chloride (PVC) pipe was installed in the perimeter trench and the trench was backfilled with crushed stone and capped with three inches of concrete to match the existing slab grade. The trench piping was connected to above-slab ventilation piping that extends up to the floor joists, exits the building above the sill, and extends above the roofline. The EPEM also includes a wall vapor barrier system comprised of a vapor transmission plane, flexible membrane, and an approximately 1-inch-thick layer of cementitious stucco that extends up to the elevation of the outdoor ground surface. The modified basement walls and floor are coated with a two-part epoxy vapor barrier. Soil vapor is captured by the vapor transmission layer and vapor trench piping and ventilated to the outdoor ambient air, bypassing the pathway through the slab into indoor air. The ventilation system is designed so that an electric powered fan may be added to facilitate the flow of soil vapor through the ventilation system. A fan will be added to the ventilation system if and when an LSP determines that such facilitation of flow is necessary or appropriate.

A crawl space is located on the eastern side of the building (Fig. 2). The EPEM in the crawl space consists of a porous geotextile vapor transmission layer applied on the ground surface and covered by a rubberized membrane vapor barrier. A thin filter fabric and 2 to 3 inches of peastone were placed over the vapor barrier for protection. The vapor transmission layer is tied into ventilation piping that extends vertically from the crawl space, exits the building envelope, and is vented above the roofline of the building. Downdraft prevention caps were installed at the end of the ventilation pipes from the crawlspace and basement.

Indoor air testing conducted after the installation of the EPEM did not detect VOCs above laboratory method reporting limits. Installation of the EPEM achieved a condition of No Significant Risk at 95R Franklin Street.

Why an AUL is appropriate to achieve and/or maintain a condition of No Significant Risk at the Site:

The EPEM eliminated or mitigated the exposure pathway for vapor intrusion of chlorinated VOCs into the indoor air at 95R Franklin Street and achieved a condition of No Significant Risk. In order to maintain a condition of No Significant Risk, the integrity of the EPEM must be preserved. Therefore, this AUL is necessary to define the restricted and permitted activities to maintain a condition of No Significant Risk. The AUL is applicable to the entire Property.

AUL Restrictions

The purpose of the AUL is to preserve the integrity of the EPEM because it eliminates or mitigates the exposure pathway and achieves and/or maintains a condition of No Significant Risk.

The following are the activities and uses that will be permitted and prohibited at the Property subject to this AUL.

1. Activities and Uses Consistent with the AUL Opinion. The AUL Opinion provides that a condition of No Significant Risk to health, safety, public welfare, or the environment exists for any foreseeable period of time (pursuant to 310 CMR 40.0000) so long as any of the following activities and uses occur on the Property:

- (i) Any use of the existing building located on the Property, including use of the building as a residence, so long as the vapor barrier and venting system comprising the EPEM are maintained and, if an electric fan is added to the EPEM, such fan operates continuously;
- (ii) Activities and uses which are not identified by this Notice as being inconsistent with maintaining a condition of No Significant Risk;
- (iii) Such other activities or uses which, in the Opinion of an LSP, shall present no greater risk of harm to health, safety, public welfare, or the environment than the activities and uses set forth in this Paragraph; and
- (iv) Such other activities and uses not identified as being Activities and Uses Inconsistent with the AUL.

2. Activities and Uses Inconsistent with the AUL Opinion. Activities and uses which are inconsistent with the objectives of this Notice of Activity and Use Limitation, and which, if implemented at the Property, may result in a significant risk of harm to health, safety, public welfare, or the environment or in a substantial hazard, are as follows:

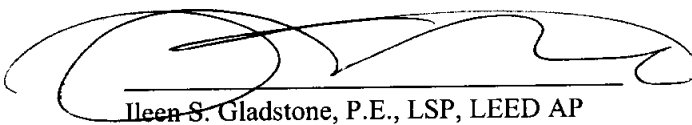
- (i) In the basement, removal or damage of the concrete floor, the overlying epoxy coating, the vapor barrier, the sub-slab venting system, and/or the protective stucco wall finish;
- (ii) In the basement, any activities which may damage and/or compromise the concrete floor, the overlying epoxy coating, the vapor barrier, the sub-slab venting system, and/or the protective stucco wall finish;
- (iii) In the crawlspace, removal or damage of the vapor transmission layer, vapor barrier, geotextile, and/or the peastone layer;
- (iv) In the crawlspace, any activities which may damage and/or compromise the vapor transmission layer, vapor barrier, geotextile, and/or the peastone layer;
- (v) In the event an electric fan is added to the EPEM, removal or damage of such fan;
- (vi) In the event an electric fan is added to the EPEM, shutting down, turning off, or removing electrical power to the fan, or any other activity that would make such fan inoperable;
- (vii) Any activities which may damage and/or compromise the ventilation piping located on the exterior of the building; and
- (viii) Construction of any occupied structure at the Property without the installation of an EPEM and subsequent indoor air sampling to confirm its effectiveness in preventing or mitigating vapor intrusion into the structure.

3. Obligations and Conditions Set Forth in the AUL Opinion. Obligations and/or conditions to be undertaken and/or maintained at the Property to maintain a condition of No Significant Risk as set forth in the AUL Opinion shall include the following:

- (i) In the basement, the integrity of the concrete floor, the overlying epoxy floor coating, the vapor barrier, the sub-slab venting system, and the protective stucco wall finish of the existing building must be preserved and the elements of the EPEM must not be damaged or altered;
- (ii) In the crawlspace, the integrity of the vapor transmission layer, vapor barrier, geotextile, and peastone layer must be preserved and the elements of the EPEM must not be damaged or altered;
- (iii) On the exterior of the building, the integrity of the ventilation piping must be preserved and the elements of the piping must not be damaged or altered;
- (iv) In the event an electric fan is added to the EPEM, power must be maintained to such fan and the fan may not be shut down;
- (v) In the event an electric fan is added to the EPEM, notification must be provided to UniFirst Corporation, together with its successors and assigns and/or its agents, if such fan becomes inoperable, and access must be provided to UniFirst Corporation, together with its successors and assigns and/or its agents, to repair or replace the fan as necessary;
- (vi) Access must be provided, at least annually, to UniFirst Corporation, together with its successors and assigns and/or its agents, to inspect the EPEM for damage and, to the extent necessary to continue the EPEM's effectiveness in preventing or mitigating vapor intrusion into the building, to conduct indoor air testing and/or repair or replace the vapor barrier, venting system, and/or electric fan (to the extent such a fan is added to the EPEM); and
- (vii) Any future construction of an occupied structure at the Property must include the installation of an EPEM to prevent or mitigate vapor intrusion into the structure. The design of the EPEM must be incorporated into the design and construction of the future structure and must be evaluated by an LSP. Follow-up indoor air testing must be conducted to confirm the effectiveness of the EPEM in preventing or mitigating vapor intrusion into the structure.

Summary and Conclusions

This LSP Opinion has been prepared to support the implementation of a Notice of AUL for a release of oil or hazardous materials at the Property. Based on the results of the Risk Characterization and with the implementation of an AUL on the Property, it is GEI's opinion that a condition of No Significant Risk will be maintained at the Property.


ileen S. Gladstone, P.E., LSP, LEED AP

Date: 10/5/09

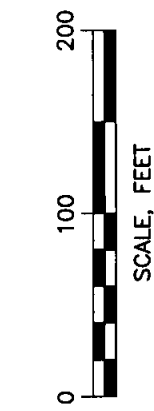


This AUL Opinion is based on the information presented in:

DEP (2007). The Massachusetts Contingency Plan (MCP) 310 CMR 40.0000, effective December 14.

GEI (2008). "Phase II Comprehensive Site Assessment, Method 3 Risk Characterization, and Phase III Remedial Action Plan, 50 Tufts Street, Somerville, Massachusetts," prepared for UniFirst Corporation, July 14.

GEI (2009). "Immediate Response Action Status Report No. 7 and Remedial Monitoring Report No. 10, 50 Tufts Street, Somerville, Massachusetts," prepared for UniFirst Corporation, May 11.

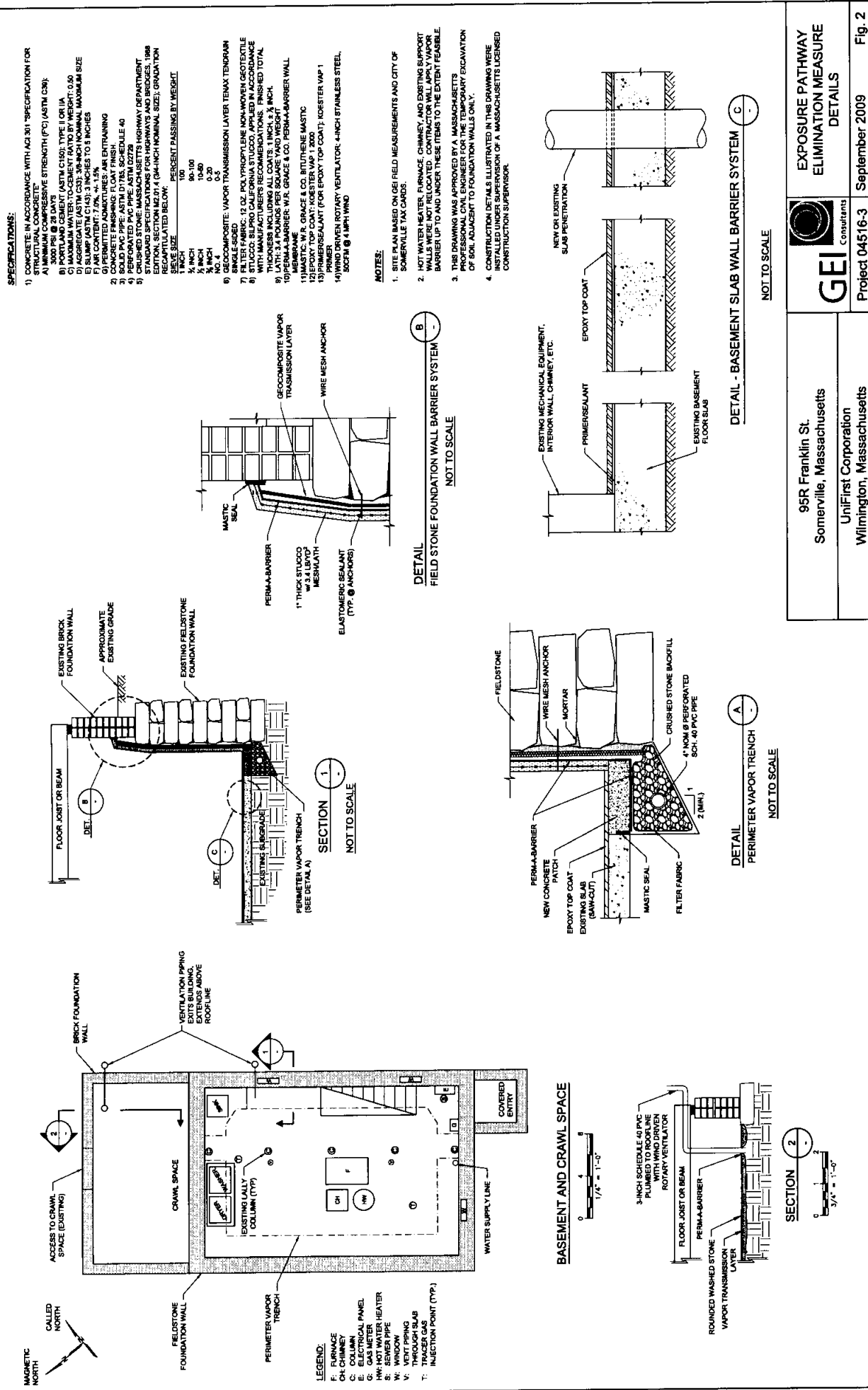


Activity and Use Limitation
50 Tufts Street
Somerville, Massachusetts
UniFirst Corporation
Wilmington, Massachusetts



PORTION OF THE
DISPOSAL SITE SUBJECT
TO THE AUL

Project 04516-3 September 2009 Fig. 1





Consulting March 18, 2025
Engineers and Project 04516-3
Scientists

Randal Isaac
Adriana Isaac
10 Morton Street
Somerville, MA 02145

Dear Mr. and Ms. Isaac:

**Re: Indoor Air and Soil Vapor Sampling
10 Morton Street
Somerville, Massachusetts**

Thank you for permitting GEI to conduct soil vapor and indoor air sampling at your property located at 10 Morton Street in Somerville, Massachusetts. Following sampling, we are providing you with a "Notice of Environmental Sampling Form (BWSC-123)," as required by the Massachusetts Department of Environmental Protection (MassDEP). We will also provide you with the results of the soil vapor and indoor air sampling after they are available from the analytical laboratory.

Thank you for your continued assistance. Please contact me at 781-721-4012 or igladstone@geiconsultants.com, if you have any questions.

Sincerely,

GEI CONSULTANTS, INC.

A blue ink signature of Helen S. Gladstone, consisting of a large, stylized 'H' followed by a series of loops and a long horizontal stroke.

Helen S. Gladstone, P.E., LSP, LEED AP
Senior Vice President

A blue ink signature of Christopher Coner, featuring a stylized 'C' followed by a series of loops and a long horizontal stroke.

Christopher Coner, CHMM
Project Manager

JWG:jam
Enclosure

c: Catherine Malagrida, UniFirst Corporation
MassDEP-NERO (as part of Status Report)



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

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A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: _____
City/Town: _____ Zip Code: _____

B. This notice is being provided to the following party:

1. Name: _____
2. Street Address: _____
City/Town: _____ Zip Code: _____

C. This notice is being given to inform its recipient (the party listed in Section B):

1. That environmental sampling ~~will be~~/has been conducted at property owned by the recipient of this notice.
2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.
3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling ~~will be~~/has been conducted:

1. Street Address: _____
City/Town: _____ Zip Code: _____
2. MCP phase of work during which the sampling ~~will be~~/has been conducted:
- | | |
|--|---|
| Immediate Response Action | Phase III Feasibility Evaluation |
| Release Abatement Measure | Phase IV Remedy Implementation Plan |
| Utility-related Abatement Measure | Phase V/Remedy Operation Status |
| Phase I Initial Site Investigation | Post-Temporary Solution Operation, Maintenance and Monitoring |
| Phase II Comprehensive Site Assessment | Other _____
(specify) |
3. Description of property where sampling ~~will be~~/has been conducted:
residential commercial industrial school/playground Other _____
(specify)
4. Description of the sampling locations and types (e.g., soil, groundwater, indoor air, soil gas) to the extent known at the time of this notice.

E. Contact information related to the party providing this notice:

Contact Name: _____
Street Address: _____
City/Town: _____ Zip Code: _____
Telephone: _____ Email: _____



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

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NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation of a release for which a notification to MassDEP has been made under the Massachusetts Contingency Plan (310 CMR 40.0300) on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at <http://www.mass.gov/eea/agencies/massdep/cleanup>. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See <http://public.dep.state.ma.us/SearchableSites2/Search.aspx> to view site-specific files on-line or <http://mass.gov/eea/agencies/massdep/about/contacts/conduct-a-file-review.html> if you would like to make an appointment to see these files in person. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.



Consulting
Engineers and
Scientists

April 7, 2025
Project 04516-3

Steven and Lauren Miller
11 Morton Street
Somerville, MA 02145

Dear Mr. and Mrs. Miller:

**Re: Indoor Air Sampling
11 Morton Street
Somerville, Massachusetts**

Thank you for permitting GEI to conduct indoor air sampling at your property located at 11 Morton Street in Somerville, Massachusetts. Prior to sampling, we are providing you with a "Notice of Environmental Sampling Form (BWSC-123)," as required by the Massachusetts Department of Environmental Protection (MassDEP). We will also provide you with the results of the indoor air sampling after they are available from the analytical laboratory.

Thank you for your continued assistance. Please contact me at 781-721-4012 or igladstone@geiconsultants.com, if you have any questions.

Sincerely,

GEI CONSULTANTS, INC.

A blue ink signature of Ileen S. Gladstone, consisting of a series of loops and a long horizontal stroke.

Ileen S. Gladstone, P.E., LSP, LEED AP
Senior Vice President

A blue ink signature of Christopher Coner, featuring a stylized, cursive script.

Christopher Coner, CHMM
Project Manager

JWG/:jam
Enclosure

c: Catherine Malagrida, UniFirst Corporation
MassDEP-NERO (as part of Status Report)

B:\Private\04516\2.0 Correspondence\2.4 Residences\Individual Residences\Morton Street\11 Morton\2025 Sampling Letters\11 Morton Street NOS Ltr Feb 2025.docx



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

3 - 23246

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: 50 Tufts Street
City/Town: Somerville, MA Zip Code: 02145-4129

B. This notice is being provided to the following party:

1. Name: Lauren and Steven Miller
2. Street Address: 11 Morton Street
City/Town: Somerville, MA Zip Code: 02145

C. This notice is being given to inform its recipient (the party listed in Section B):

- ☒ 1. That environmental sampling will be ~~has been~~ conducted at property owned by the recipient of this notice.
☐ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.
☐ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be ~~has been~~ conducted:

1. Street Address: 11 Morton Street
City/Town: Somerville, MA Zip Code: 02145-4205
2. MCP phase of work during which the sampling will be ~~has been~~ conducted:
- | | |
|---|--|
| ☐ Immediate Response Action | ☐ Phase III Feasibility Evaluation |
| ☐ Release Abatement Measure | ☐ Phase IV Remedy Implementation Plan |
| ☐ Utility-related Abatement Measure | ☒ Phase V/Remedy Operation Status |
| ☐ Phase I Initial Site Investigation | ☐ Post-Temporary Solution Operation, Maintenance and Monitoring |
| ☐ Phase II Comprehensive Site Assessment | ☐ Other _____ |
- (specify)
3. Description of property where sampling will be ~~has been~~ conducted:
☒ residential ☐ commercial ☐ industrial ☐ school/playground ☐ Other _____
(specify)
4. Description of the sampling locations and types (e.g., soil, groundwater, indoor air, soil gas) to the extent known at the time of this notice.

Indoor Air Sampling

E. Contact information related to the party providing this notice:

Contact Name: Ileen Gladstone, P.E., LSP, LEED AP
Street Address: GEI Consultants, Inc., 400 Unicorn Park Drive
City/Town: Woburn, MA Zip Code: 01801-3341
Telephone: (781) 721-4012 Email: igladstone@geiconsultants.com



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

NOTICE OF ENVIRONMENTAL SAMPLING

3 - 23246

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation of a release for which a notification to MassDEP has been made under the Massachusetts Contingency Plan (310 CMR 40.0300) on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at <http://www.mass.gov/eea/agencies/massdep/cleanup>. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See <http://public.dep.state.ma.us/SearchableSites2/Search.aspx> to view site-specific files on-line or <http://mass.gov/eea/agencies/massdep/about/contacts/conduct-a-file-review.html> if you would like to make an appointment to see these files in person. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

June 25, 2025
Project 045163

Steven and Lauren Miller
11 Morton Street, Unit 1
Somerville, MA 02145

**Re: Indoor Air Sampling Results
11 Morton Street, Unit 1
Somerville, Massachusetts**

Dear Mr. and Mrs. Miller:

On behalf of the UniFirst Corporation, GEI Consultants, Inc. collected indoor air samples on April 8 and May 7, 2025, at your property located at 11 Morton Street in connection with the ongoing monitoring associated with the historical impacts at the 50 Tufts Street site.

On April 8, 2025, one indoor air sample was collected on the first floor and one indoor air sample was collected in the basement. The samples were collected over a 24-hour period. During sampling, the hardware used to collect the sample in the basement malfunctioned, and the sample was not able to be analyzed by the laboratory. GEI returned on May 7 to recollect both the first floor and basement indoor air samples. The samples were collected over a 24-hour period. Attached is a summary table of the chemicals detected in the indoor air samples (Table 1), and the laboratory data sheets for the recent sampling.

Tetrachloroethylene (PCE) was detected in both the first floor and basement samples during the May 2025 sampling, but it was not detected in the first floor sample during the April 2025 sampling. Concentrations of PCE were detected at 0.203 micrograms per meter cubed ($\mu\text{g}/\text{m}^3$) on the first floor and 0.217 $\mu\text{g}/\text{m}^3$ in the basement. Trichloroethylene (TCE) was detected on the first floor in both the April and May 2025 sampling events at concentrations of 1.05 $\mu\text{g}/\text{m}^3$ and 2.77 $\mu\text{g}/\text{m}^3$, respectively, and was detected at a concentration of 0.269 $\mu\text{g}/\text{m}^3$ in the basement during the May 2025 sampling. No other chlorinated volatile organic compounds (CVOCs) were detected in the samples.

In accordance with Massachusetts Department of Environmental Protection (MassDEP) protocols, GEI performed a risk assessment screening using the May 7, 2025, indoor air results. The risk assessment screening demonstrates that the indoor air concentrations pose no significant risk (NSR) to a residential occupant based on a conservative assumed exposure duration of 24-hours per day.

MassDEP regulations provide that individuals and public officials may request additional public involvement activities under the Massachusetts Contingency Plan (MCP; 310 CMR 40.1403(9) and 40.1404). The property owner may also request additional documentation, such as that listed at

310 CMR 40.0017(3), associated with the above-referenced samples. We will provide such additional documentation within 30 days of our receipt of such a request.

We appreciate your continued cooperation throughout the sampling process. If you have any questions regarding the sampling results, please do not hesitate to contact me at 781.721.4012 or igladstone@geiconsultants.com.

Sincerely,

GEI CONSULTANTS, INC.



Ileen S. Gladstone, P.E, LSP
Senior Vice President



Christopher O. Coner, CHMM
Project Manager

MEF:jam

Attachments

cc: Catherine Malagrida, UniFirst Corporation
MassDEP via Status Report



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

3 - 23246

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: 50 Tufts Street
City/Town: Somerville, MA Zip Code: 02145-4129

B. This notice is being provided to the following party:

1. Name: Lauren and Steven Miller
2. Street Address: 11 Morton Street
City/Town: Somerville, MA Zip Code: 02145

C. This notice is being given to inform its recipient (the party listed in Section B):

- ☒ 1. That environmental sampling ~~will be~~/has been conducted at property owned by the recipient of this notice.
- ☒ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.
- ☒ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling ~~will be~~/has been conducted:

1. Street Address: 11 Morton Street
City/Town: Somerville, MA Zip Code: 02145-4205
2. MCP phase of work during which the sampling ~~will be~~/has been conducted:
- | | |
|---|--|
| ☐ Immediate Response Action | ☐ Phase III Feasibility Evaluation |
| ☐ Release Abatement Measure | ☐ Phase IV Remedy Implementation Plan |
| ☐ Utility-related Abatement Measure | ☒ Phase V/Remedy Operation Status |
| ☐ Phase I Initial Site Investigation | ☐ Post-Temporary Solution Operation, Maintenance and Monitoring |
| ☐ Phase II Comprehensive Site Assessment | ☐ Other _____ |
- (specify)
3. Description of property where sampling ~~will be~~/has been conducted:
- ☒ residential ☐ commercial ☐ industrial ☐ school/playground ☐ Other _____
- (specify)
4. Description of the sampling locations and types (e.g., soil, groundwater, indoor air, soil gas) to the extent known at the time of this notice.

Indoor Air Sampling

E. Contact information related to the party providing this notice:

Contact Name: Ileen Gladstone, P.E., LSP, LEED AP
Street Address: GEI Consultants, Inc., 400 Unicorn Park Drive
City/Town: Woburn, MA Zip Code: 01801-3341
Telephone: (781) 721-4012 Email: igladstone@geiconsultants.com



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

3 - 23246

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation of a release for which a notification to MassDEP has been made under the Massachusetts Contingency Plan (310 CMR 40.0300) on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at <http://www.mass.gov/eea/agencies/massdep/cleanup>. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See <http://public.dep.state.ma.us/SearchableSites2/Search.aspx> to view site-specific files on-line or <http://mass.gov/eea/agencies/massdep/about/contacts/conduct-a-file-review.html> if you would like to make an appointment to see these files in person. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Table 1
Chemical Testing Results - Post-EPMM Installation Indoor Air
11 Morton Street
Somerville, Massachusetts

Sample Location: Sample Name: Sample Date: Units:		11 Morton Street																			
		11 MORT-1 10/23/08		11 MORT-B 10/23/08		11MORT-1A 1/21/09		11MORT-1B 1/21/09		11MORT-B1 1/21/09		11MORT-B2 1/21/09		11MORT-1 8/11/09		11MORT-B 8/11/09		11MORT-1 2/23/10		11MORT-B 2/23/10	
		µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
Analyte	Method																				
Volatile Organic Compounds (VOCs)	TO-15																				
Carbon tetrachloride		0.63 J	0.10 J	0.69 J	0.11 J	0.88 J	0.14 J	0.82 J	0.13 J	1.6	0.25	1.5	0.24	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20
1,2-Dichloroethane		0.45 J	0.11 J	0.49 J	0.12 J	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	11	2.8	2.0	0.49	< 0.81	< 0.20	< 0.81	< 0.20
Tetrachloroethylene (PCE)		< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20
Trichloroethylene (TCE)		< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20
1,1,1-Trichloroethane (TCA)		< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	1.3	0.24	< 1.1	< 0.20

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. "<" = The analyte was not detected at a concentration above the specified laboratory reporting limit.
5. The samples from January 21, 2009 (11MORT-B1 and B2, and 11MORT-1A and 1B) were field duplicates of each other.
6. The laboratory notes for 11MORT-B from April 2025 indicate that the cansiter ran ambient.
7. Samples highlighted in gray indicate most recent round of testing.

Qualifying Note:

- J The reported result is below the laboratory reporting limit and is estimated.

Table 1
Chemical Testing Results - Post-EPMM Installation Indoor Air
11 Morton Street
Somerville, Massachusetts

Sample Location: Sample Name: Sample Date: Units:		11 Morton Street (continued)													
		11MORT-1 2/17/16		11MORT-B 2/17/16		11MORT-1 5/26/21		11MORT-B 5/26/21		11MORT-1 4/8/25		11MORT-1 5/7/25		11MORT-B 5/7/25	
		µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
Analyte	Method														
Volatile Organic Compounds (VOCs)	TO-15														
Carbon tetrachloride		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1,2-Dichloroethane		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Tetrachloroethylene (PCE)		1.7	0.25	2.2	0.33	0.190	0.028	<0.136	<0.020	<0.136	<0.020	0.203	0.030	0.217	0.032
Trichloroethylene (TCE)		< 0.21	< 0.040	< 0.21	< 0.040	0.279	0.052	0.301	0.056	1.05	0.196	2.77	0.516	0.269	0.05
1,1,1-Trichloroethane (TCA)		< 1.1	< 0.20	< 1.1	< 0.20	<0.109	<0.020	<0.109	<0.020	<0.109	<0.020	<0.109	<0.020	<0.109	<0.020

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. "<" = The analyte was not detected at a concentration above the specified laboratory reporting limit.
5. The samples from January 21, 2009 (11MORT-B1 and B2, and 11MORT-1A and 1B) were field duplicates of each other.
6. The laboratory notes for 11MORT-B from April 2025 indicate that the cansiter ran ambient.
7. Samples highlighted in gray indicate most recent round of testing.

Qualifying Note:

- J The reported result is below the laboratory reporting limit and is estimated.

Project Name: TUFTS ST.**Project Number:** 045163**Lab Number:** L2522887**Report Date:** 04/25/25**SAMPLE RESULTS**

Lab ID: L2522887-01
 Client ID: 045163-11MORT-1
 Sample Location: SOMERVILLE, MA

Date Collected: 04/08/25 09:11
 Date Received: 04/09/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 04/25/25 00:37
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	0.196	0.020	--	1.05	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	96		60-140
bromochloromethane	96		60-140
chlorobenzene-d5	106		60-140



Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2528265**Report Date:** 05/27/25**SAMPLE RESULTS**

Lab ID: L2528265-01
 Client ID: 045163-11MORT-F1
 Sample Location: SOMERVILLE,MA

Date Collected: 05/07/25 09:03
 Date Received: 05/07/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 05/19/25 01:55
 Analyst: RAY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	0.516	0.020	--	2.77	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.030	0.020	--	0.203	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	87		60-140
bromochloromethane	91		60-140
chlorobenzene-d5	92		60-140



Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2528265**Report Date:** 05/27/25**SAMPLE RESULTS**

Lab ID: L2528265-02
 Client ID: 045163-11MORT-B
 Sample Location: SOMERVILLE,MA

Date Collected: 05/07/25 09:07
 Date Received: 05/07/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 05/19/25 02:37
 Analyst: RAY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	0.050	0.020	--	0.269	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.032	0.020	--	0.217	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	85		60-140
bromochloromethane	90		60-140
chlorobenzene-d5	87		60-140





Consulting
Engineers and
Scientists

March 4, 2025
Project 04516-3

Clementina Cabral
17 Knowlton Street
Somerville, MA 02145

Dear Ms. Cabral:

**Re: Indoor Air Sampling
17 Knowlton Street
Somerville, Massachusetts**

Thank you for permitting GEI to conduct indoor air sampling at your property located at 17 Knowlton Street in Somerville, Massachusetts. Prior to sampling, we are providing you with a "Notice of Environmental Sampling Form (BWSC-123)," as required by the Massachusetts Department of Environmental Protection (MassDEP). We will also provide you with the results of the indoor air sampling after they are available from the analytical laboratory.

Thank you for your continued assistance. Please contact me at 781-721-4012 or igladstone@geiconsultants.com, if you have any questions.

Sincerely,

GEI CONSULTANTS, INC.

A blue ink signature of Ileen S. Gladstone, consisting of a large, stylized 'G' followed by a horizontal line and a small flourish.

Ileen S. Gladstone, P.E., LSP, LEED AP
Senior Vice President

A blue ink signature of Christopher Coner, featuring a stylized 'C' followed by a horizontal line and a small flourish.

Christopher Coner, CHMM
Project Manager

JWG/:jam
Enclosure

c: Catherine Malagrida, UniFirst Corporation
MassDEP-NERO (as part of Status Report)

B:\Private\04516\2.0 Correspondence\2.4 Residences\Individual Residences\Knowlton Street\17 Knowlton\2025 Sampling Letters\17 Knowlton Street NOS Ltr Feb 2025.docx



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

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A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: _____
City/Town: _____ Zip Code: _____

B. This notice is being provided to the following party:

1. Name: _____
2. Street Address: _____
City/Town: _____ Zip Code: _____

C. This notice is being given to inform its recipient (the party listed in Section B):

1. That environmental sampling will be ~~has been~~ conducted at property owned by the recipient of this notice.
2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.
3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be ~~has been~~ conducted:

1. Street Address: _____
City/Town: _____ Zip Code: _____
2. MCP phase of work during which the sampling will be ~~has been~~ conducted:
- | | |
|--|---|
| Immediate Response Action | Phase III Feasibility Evaluation |
| Release Abatement Measure | Phase IV Remedy Implementation Plan |
| Utility-related Abatement Measure | Phase V/Remedy Operation Status |
| Phase I Initial Site Investigation | Post-Temporary Solution Operation, Maintenance and Monitoring |
| Phase II Comprehensive Site Assessment | Other _____
(specify) |
3. Description of property where sampling will be ~~has been~~ conducted:
residential commercial industrial school/playground Other _____
(specify)
4. Description of the sampling locations and types (e.g., soil, groundwater, indoor air, soil gas) to the extent known at the time of this notice.

E. Contact information related to the party providing this notice:

Contact Name: _____
Street Address: _____
City/Town: _____ Zip Code: _____
Telephone: _____ Email: _____



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

	-	
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NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation of a release for which a notification to MassDEP has been made under the Massachusetts Contingency Plan (310 CMR 40.0300) on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at <http://www.mass.gov/eea/agencies/massdep/cleanup>. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See <http://public.dep.state.ma.us/SearchableSites2/Search.aspx> to view site-specific files on-line or <http://mass.gov/eea/agencies/massdep/about/contacts/conduct-a-file-review.html> if you would like to make an appointment to see these files in person. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

April 3, 2025
Project 045163

Ms. Clementina Cabral
17 Knowlton Street
Somerville, MA 02143

Re: Indoor Air Sampling Results
17 Knowlton Street, Somerville, Massachusetts

Dear Ms. Cabral:

On behalf of the UniFirst Corporation, GEI Consultants, Inc. collected indoor air samples on March 6, 2025, at your property at 17 Knowlton Street to evaluate the potential for vapor intrusion.

On March 6, 2025, one indoor air sample was collected on the first floor and one sample was collected in the basement. The samples were collected over a 24-hour period. Attached is a summary table of the chemicals detected in the indoor air samples (Table 1), and the laboratory data sheets for the recent sampling.

Tetrachloroethylene (PCE) was detected in both the first floor and basement samples. Concentrations of PCE were detected at 0.163 micrograms per meter cubed ($\mu\text{g}/\text{m}^3$) on the first floor and 0.203 $\mu\text{g}/\text{m}^3$ in the basement. No other chlorinated VOCs were detected above the laboratory reporting limit.

The detected indoor air concentrations are below the applicable MassDEP residential and commercial indoor air threshold values.

Individuals and public officials may request additional public involvement activities under the Massachusetts Contingency Plan (MCP; 310 CMR 40.1403(9) and 40.1404). The property owner may also request additional documentation, such as that listed at 310 CMR 40.0017(3), associated with the above-referenced samples. We will provide such additional documentation within 30 days of our receipt of such a request.

We appreciate your continued cooperation throughout the sampling process. If you have any questions regarding the sampling results, please do not hesitate to contact me at 781.721.4012 or igladstone@geiconsultants.com.

Sincerely,

GEI Consultants, Inc



Ileen S. Gladstone, P.E, LSP
Senior Vice President



Christopher O. Coner, CHMM
Project Manager

JWG/MEF:jam

B:\Private\04516\2.0 Correspondence\2.4 Residences\Individual Residences\Knowlton Street\17 Knowlton\2025 Sampling Letters\February 2025 Results\17 Knowlton March Results Ltr.docx

Attachments

cc: Catherine Malagrida, UniFirst Corporation
MassDEP via Status Report



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

3 - 23246

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: 50 Tufts Street
City/Town: Somerville, MA Zip Code: 02145-4129

B. This notice is being provided to the following party:

1. Name: Clementina Cabral
2. Street Address: 17 Knowlton Street
City/Town: Somerville, MA Zip Code: 02145-4225

C. This notice is being given to inform its recipient (the party listed in Section B):

- ☒ 1. That environmental sampling ~~will be~~/has been conducted at property owned by the recipient of this notice.
- ☒ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.
- ☒ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling ~~will be~~/has been conducted:

1. Street Address: 17 Knowlton Street
City/Town: Somerville, MA Zip Code: 02145-4225
2. MCP phase of work during which the sampling ~~will be~~/has been conducted:
- | | |
|---|--|
| ☐ Immediate Response Action | ☐ Phase III Feasibility Evaluation |
| ☐ Release Abatement Measure | ☐ Phase IV Remedy Implementation Plan |
| ☐ Utility-related Abatement Measure | ☒ Phase V/Remedy Operation Status |
| ☐ Phase I Initial Site Investigation | ☐ Post-Temporary Solution Operation, Maintenance and Monitoring |
| ☐ Phase II Comprehensive Site Assessment | ☐ Other _____ |
- (specify)
3. Description of property where sampling ~~will be~~/has been conducted:
- ☒ residential ☐ commercial ☐ industrial ☐ school/playground ☐ Other _____
- (specify)
4. Description of the sampling locations and types (e.g., soil, groundwater, indoor air, soil gas) to the extent known at the time of this notice.

Indoor Air Sampling

E. Contact information related to the party providing this notice:

Contact Name: Ileen Gladstone, P.E., LSP, LEED AP
Street Address: GEI Consultants, Inc., 400 Unicorn Park Drive
City/Town: Woburn, MA Zip Code: 01801-3341
Telephone: (781) 721-4012 Email: igladstone@geiconsultants.com



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

NOTICE OF ENVIRONMENTAL SAMPLING

3 - 23246

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation of a release for which a notification to MassDEP has been made under the Massachusetts Contingency Plan (310 CMR 40.0300) on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at <http://www.mass.gov/eea/agencies/massdep/cleanup>. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See <http://public.dep.state.ma.us/SearchableSites2/Search.aspx> to view site-specific files on-line or <http://mass.gov/eea/agencies/massdep/about/contacts/conduct-a-file-review.html> if you would like to make an appointment to see these files in person. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

**Table 1 - Chemical Testing Results - Pre- and Post-
EPEM Installation Indoor Air
17 Knowlton Street
Somerville, Massachusetts**

Sample Location: Sample Name: Sample Date: Units:		17 Knowlton Street pre-EPEM				17 Knowlton Street post-EPEM									
		17KNOW-1 10/5/07		17KNOW-B 10/5/07		17KNOW-1 5/13/09		17KNOW-B 5/13/09		17KNOW-1 6/5/09		17KNOW-B 6/5/09		17KNOW-B 11/19/10	
		µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
		µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
Analyte	Method														
Volatile Organic Compounds (VOCs)	TO-15														
1,1,1-Trichloroethane (TCA)		0.13 J	0.71 J	<1.1	<0.20	<1.1	< 0.20	<1.1	< 0.20	<1.1	< 0.20	<1.1	< 0.20	<1.1	< 0.20
1,1,2,2-Tetrachloroethane		<1.4	<0.20	<1.4	<0.20	<1.4	< 0.20	<1.4	< 0.20	<1.4	< 0.20	<1.4	< 0.20	<1.4	< 0.20
1,1,2-Trichloroethane		<1.1	<0.20	<1.1	<0.20	<1.1	< 0.20	<1.1	< 0.20	<1.1	< 0.20	<1.1	< 0.20	<1.1	< 0.20
1,1-Dichloroethane		<0.81	<0.20	<0.81	<0.20	<0.81	< 0.20	<0.81	< 0.20	<0.81	< 0.20	<0.81	< 0.20	<0.81	< 0.20
1,1-Dichloroethene		<0.79	<0.20	<0.79	<0.20	<0.79	< 0.20	<0.79	< 0.20	<0.79	< 0.20	<0.79	< 0.20	<0.79	< 0.20
1,2-Dichloroethane (DCA)		<0.81	<0.20	<0.81	<0.20	0.81	0.20	< 0.81	< 0.20	0.93	0.23	< 0.81	< 0.20	NT	NT
Carbon tetrachloride		0.63 J	0.10 J	0.60 J	0.095 J	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	NT	NT
Chloroethane		<0.53	<0.20	<0.53	<0.20	<0.53	< 0.20	<0.53	< 0.20	<0.53	< 0.20	<0.53	< 0.20	NT	NT
cis-1,2-Dichloroethene		<0.79	<0.20	<0.79	<0.20	<0.79	< 0.20	<0.79	< 0.20	<0.79	< 0.20	<0.79	< 0.20	<0.79	< 0.20
Tetrachloroethylene (PCE)		1.7	0.25	2.7	0.40	1.6	0.23	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20
trans-1,2-Dichloroethene		<0.79	<0.20	<0.79	<0.20	<0.79	< 0.20	<0.79	< 0.20	<0.79	< 0.20	<0.79	< 0.20	<0.79	< 0.20
Trichloroethene		<1.1	<0.20	<1.1	<0.20	<1.1	< 0.20	<1.1	< 0.20	<1.1	< 0.20	<1.1	< 0.20	<1.1	< 0.20
Vinyl Chloride		<0.51	<0.20	<0.51	<0.20	<0.51	<0.20	<0.51	< 0.20	<0.51	< 0.20	<0.51	< 0.20	<0.51	< 0.20

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. EPMM = Exposure Pathway Mitigation Measure.
5. NT= Not tested
6. Highlighted sample indicates most recent sampling round.

Qualifying Note:

- J The reported result is below the laboratory reporting limit and is estimated.

Table 1 - Chemical Testing Results - Pre- and Post-EPEM Installation Indoor Air
17 Knowlton Street
Somerville, Massachusetts

Sample Location:		17 Knowlton Street post-EPEM (continued)											
Sample Name:		17KNOW-1		17KNOW-B		17KNOW-1		17KNOW-B		17KNOW-1		17KNOW-B	
Sample Date:		2/24/11		2/24/11		3/8/12		3/8/12		3/6/25		3/6/25	
Units:		µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
Analyte	Method												
Volatile Organic Compounds (VOCs)	TO-15												
1,1,1-Trichloroethane (TCA)		<1.1	< 0.20	<1.1	< 0.20	<1.1	< 0.20	<1.1	< 0.20	<0.109	<0.020	<0.109	<0.020
1,1,2,2-Tetrachloroethane		<1.4	< 0.20	<1.4	< 0.20	<1.4	< 0.20	<1.4	< 0.20	<0.137	<0.020	<0.137	<0.020
1,1,2-Trichloroethane		<1.1	< 0.20	<1.1	< 0.20	<1.1	< 0.20	<1.1	< 0.20	<0.109	<0.020	<0.109	<0.020
1,1-Dichloroethane		<0.81	< 0.20	<0.81	< 0.20	<0.81	< 0.20	<0.81	< 0.20	<0.081	<0.020	<0.081	<0.020
1,1-Dichloroethene		<0.79	< 0.20	<0.79	< 0.20	<0.79	< 0.20	<0.79	< 0.20	<0.079	<0.020	<0.079	<0.020
1,2-Dichloroethane (DCA)		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Carbon tetrachloride		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Chloroethane		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
cis-1,2-Dichloroethene		<0.79	< 0.20	<0.79	< 0.20	<0.79	< 0.20	<0.79	< 0.20	<0.079	<0.020	<0.079	<0.020
Tetrachloroethylene (PCE)		1.1 J	0.16 J	3.3	0.49	2.6	0.39	< 1.4	< 0.20	0.163	0.024	0.203	0.030
trans-1,2-Dichloroethene		<0.79	< 0.20	<0.79	< 0.20	<0.79	< 0.20	<0.79	< 0.20	<0.079	<0.020	<0.079	<0.020
Trichloroethene		<1.1	< 0.20	<1.1	< 0.20	<1.1	< 0.20	<1.1	< 0.20	<0.107	<0.020	<0.107	<0.020
Vinyl Chloride		<0.51	< 0.20	<0.51	< 0.20	<0.51	< 0.20	<0.51	< 0.20	<0.051	<0.020	<0.051	<0.020

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. EPMM = Exposure Pathway Mitigation Measure.
5. NT= Not tested
6. Highlighted sample indicates most recent sampling round.

Qualifying Note:

- J The reported result is below the laboratory reporting limit and is estimated.

Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2513253**Report Date:** 03/26/25**SAMPLE RESULTS**

Lab ID: L2513253-01
 Client ID: 045163-17KNOW-1
 Sample Location: SOMERVILLE, MA

Date Collected: 03/06/25 10:04
 Date Received: 03/07/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/25/25 23:26
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.024	0.020	--	0.163	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	83		60-140
bromochloromethane	83		60-140
chlorobenzene-d5	82		60-140



Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2513253**Report Date:** 03/26/25**SAMPLE RESULTS**

Lab ID: L2513253-02
 Client ID: 045163-17KNOW-B
 Sample Location: SOMERVILLE, MA

Date Collected: 03/06/25 10:07
 Date Received: 03/07/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/26/25 00:05
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.030	0.020	--	0.203	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	84		60-140
bromochloromethane	83		60-140
chlorobenzene-d5	85		60-140





Consulting
Engineers and
Scientists

February 26, 2025
Project 04516-3

Gang Lian and Xiao-Ning Wang
5 Butterwick Lane
Old Lyme, CT 06371

Dear Gang Lian and Xiao-Ning Wang:

**Re: Indoor Air Sampling
19-19A Morton Street
Somerville, Massachusetts**

Thank you for permitting GEI to conduct indoor air sampling at your property located at 19-19A Morton Street in Somerville, Massachusetts. Following sampling, we are providing you with a "Notice of Environmental Sampling Form (BWSC-123)," as required by the Massachusetts Department of Environmental Protection (MassDEP). We will also provide you with the results of the indoor air sampling after they are available from the analytical laboratory.

Thank you for your continued assistance. Please contact me at 781-721-4012 or igladstone@geiconsultants.com, if you have any questions.

Sincerely,

GEI CONSULTANTS, INC.

A blue ink signature of Ileen S. Gladstone, consisting of a large, stylized 'G' followed by a horizontal line.

Ileen S. Gladstone, P.E., LSP, LEED AP
Senior Vice President

A blue ink signature of Christopher Coner, featuring a stylized 'C' and 'C'.

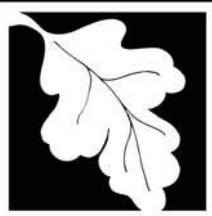
Christopher Coner, CHMM
Project Manager

JWG/:jam

Enclosure

c: Catherine Malagrida, UniFirst Corporation
MassDEP-NERO (as part of Status Report)

B:\Private\04516\2.0 Correspondence\2.4 Residences\Individual Residences\Morton Street\19-19A Morton\2025 Sampling Letters\19 and 19A Morton Street NOS Ltr Feb 2025.docx



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

3 - 23246

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: 50 Tufts Street
City/Town: Somerville, MA Zip Code: 02145-4129

B. This notice is being provided to the following party:

1. Name: Gang Lian and Xiao-Ning Wang
2. Street Address: 5 Butterwick Lane
City/Town: Old Lyme, CT Zip Code: 06371

C. This notice is being given to inform its recipient (the party listed in Section B):

- ☒ 1. That environmental sampling ~~will be~~/has been conducted at property owned by the recipient of this notice.
- ☐ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.
- ☐ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling ~~will be~~/has been conducted:

1. Street Address: 19-19A Morton Street
City/Town: Somerville, MA Zip Code: 02145-4205
2. MCP phase of work during which the sampling ~~will be~~/has been conducted:
- | | |
|---|--|
| ☐ Immediate Response Action | ☐ Phase III Feasibility Evaluation |
| ☐ Release Abatement Measure | ☐ Phase IV Remedy Implementation Plan |
| ☐ Utility-related Abatement Measure | ☒ Phase V/Remedy Operation Status |
| ☐ Phase I Initial Site Investigation | ☐ Post-Temporary Solution Operation, Maintenance and Monitoring |
| ☐ Phase II Comprehensive Site Assessment | ☐ Other _____ |
- (specify)
3. Description of property where sampling ~~will be~~/has been conducted:
- ☒ residential ☐ commercial ☐ industrial ☐ school/playground ☐ Other _____
- (specify)
4. Description of the sampling locations and types (e.g., soil, groundwater, indoor air, soil gas) to the extent known at the time of this notice.

Indoor Air Sampling

E. Contact information related to the party providing this notice:

Contact Name: Ileen Gladstone, P.E., LSP, LEED AP
Street Address: GEI Consultants, Inc., 400 Unicorn Park Drive
City/Town: Woburn, MA Zip Code: 01801-3341
Telephone: (781) 721-4012 Email: igladstone@geiconsultants.com



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

NOTICE OF ENVIRONMENTAL SAMPLING

3 - 23246

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation of a release for which a notification to MassDEP has been made under the Massachusetts Contingency Plan (310 CMR 40.0300) on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at <http://www.mass.gov/eea/agencies/massdep/cleanup>. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See <http://public.dep.state.ma.us/SearchableSites2/Search.aspx> to view site-specific files on-line or <http://mass.gov/eea/agencies/massdep/about/contacts/conduct-a-file-review.html> if you would like to make an appointment to see these files in person. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

April 3, 2025
Project 045163

Gang Lian and Ziao-Ning Wang
5 Butterwick Lane
Old Lyme, CT 06371

**Re: Indoor Air Sampling Results
19-19A Morton Street, Somerville, Massachusetts**

Dear Gang Lian and Ziao-Ning Wang:

On behalf of the UniFirst Corporation, GEI Consultants, Inc. collected indoor air samples on February 27, 2025, at your property at 19-19A Morton Street to evaluate the potential for vapor intrusion.

On February 27, 2025, one indoor air sample was collected on the first floor and one indoor air sample was collected in the basement. The samples were collected over a 24-hour period. Attached is a summary table of the chemicals detected in the indoor air samples (Table 1), and the laboratory data sheets for the recent sampling.

Tetrachloroethylene (PCE) was detected in both the first floor and basement samples. Concentrations of PCE were detected at 0.136 micrograms per meter cubed ($\mu\text{g}/\text{m}^3$) on the first floor and 0.142 $\mu\text{g}/\text{m}^3$ in the basement. No other chlorinated volatile organic compounds (CVOCs) were detected in the samples.

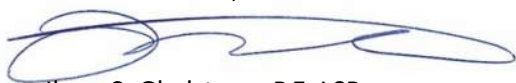
The detected indoor air concentrations of PCE are below the applicable MassDEP residential indoor air threshold values.

Individuals and public officials may request additional public involvement activities under the Massachusetts Contingency Plan (MCP; 310 CMR 40.1403(9) and 40.1404). The property owner may also request additional documentation, such as that listed at 310 CMR 40.0017(3), associated with the above-referenced samples. We will provide such additional documentation within 30 days of our receipt of such a request.

We appreciate your continued cooperation throughout the sampling process. If you have any questions regarding the sampling results, please do not hesitate to contact me at 781.721.4012 or igladstone@geiconsultants.com.

Sincerely,

GEI Consultants, Inc



Ileen S. Gladstone, P.E, LSP
Senior Vice President



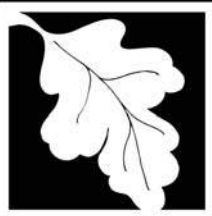
Christopher O. Coner, CHMM
Project Manager

JWG/MEF:jam

B:\Private\04516\2.0 Correspondence\2.4 Residences\Individual Residences\Franklin Street\91-93 Franklin\2025 Sampling Letters\February Results\91-93 Franklin Feb Results Ltr.docx

Attachments

cc: Catherine Malagrida, UniFirst Corporation
MassDEP via Status Report



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

3 - 23246

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: 50 Tufts Street
City/Town: Somerville, MA Zip Code: 02145-4129

B. This notice is being provided to the following party:

1. Name: Gang Lian and Xiao-Ning Wang
2. Street Address: 5 Butterwick Lane
City/Town: Old Lyme, CT Zip Code: 06371

C. This notice is being given to inform its recipient (the party listed in Section B):

- ☒ 1. That environmental sampling ~~will be~~/has been conducted at property owned by the recipient of this notice.
- ☒ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.
- ☒ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling ~~will be~~/has been conducted:

1. Street Address: 19-19A Morton Street
City/Town: Somerville, MA Zip Code: 02145-4205
2. MCP phase of work during which the sampling ~~will be~~/has been conducted:
- | | |
|---|--|
| ☐ Immediate Response Action | ☐ Phase III Feasibility Evaluation |
| ☐ Release Abatement Measure | ☐ Phase IV Remedy Implementation Plan |
| ☐ Utility-related Abatement Measure | ☒ Phase V/Remedy Operation Status |
| ☐ Phase I Initial Site Investigation | ☐ Post-Temporary Solution Operation, Maintenance and Monitoring |
| ☐ Phase II Comprehensive Site Assessment | ☐ Other _____ |
- (specify)
3. Description of property where sampling ~~will be~~/has been conducted:
- ☒ residential ☐ commercial ☐ industrial ☐ school/playground ☐ Other _____
- (specify)
4. Description of the sampling locations and types (e.g., soil, groundwater, indoor air, soil gas) to the extent known at the time of this notice.

Indoor Air Sampling

E. Contact information related to the party providing this notice:

Contact Name: Ileen Gladstone, P.E., LSP, LEED AP
Street Address: GEI Consultants, Inc., 400 Unicorn Park Drive
City/Town: Woburn, MA Zip Code: 01801-3341
Telephone: (781) 721-4012 Email: igladstone@geiconsultants.com



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

3

- 23246

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation of a release for which a notification to MassDEP has been made under the Massachusetts Contingency Plan (310 CMR 40.0300) on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at <http://www.mass.gov/eea/agencies/massdep/cleanup>. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See <http://public.dep.state.ma.us/SearchableSites2/Search.aspx> to view site-specific files on-line or <http://mass.gov/eea/agencies/massdep/about/contacts/conduct-a-file-review.html> if you would like to make an appointment to see these files in person. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

**Table 1 - Chemical Testing Results - Pre- and Post-
EPMM Indoor Air
19-19A Morton Street
Somerville, Massachusetts**

		Pre-EPEM 19-19A Morton Street															
		19MORT-1 7/2/07		19MORT-B 7/2/07		19MORT-1 4/4/08		19MORT-B 4/4/08		19MORT-1 8/18/08		19MORT-B 8/18/08		19MORT-1 1/13/09		19MORT-B 1/13/09	
		µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
Analyte	Method																
Volatile Organic Compounds (VOCs)	TO-15																
1,2-Dichloroethane		< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	4.9	1.2	0.73 J	0.18 J	< 0.81	< 0.20	< 0.81	< 0.20
Carbon tetrachloride		< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	0.69 J	0.11 J	0.88 J	0.14 J	0.69 J	0.11 J	0.63 J	0.10 J	< 1.3	< 0.20
Tetrachloroethylene (PCE)		< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	0.68 J	0.10 J	< 1.4	< 0.20	< 1.4	< 0.20	6.0	0.89	8.8	1.3

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. EPMM = Exposure Pathway Mitigation Measure.
5. NT= Not tested
6. Highlighted sample indicates most recent sampling round.

Qualifying Note:

- J The reported result is below the laboratory reporting limit and is estimated.

Table 1 - Chemical Testing Results - Pre- and Post-EPMM Indoor Air
19-19A Morton Street
Somerville, Massachusetts

		Post-EPEM 19-19A Morton Street															
		19MORT-1 9/3/09		19MORT-B 9/3/09		19MORT-1 1/29/10		19MORT-B 1/29/10		19MORT-1 12/7/10		19MORT-B 12/7/10		19MORT-1 4/10/11		19MORT-B 4/10/11	
		µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
Analyte	Method																
Volatile Organic Compounds (VOCs)	TO-15																
1,2-Dichloroethane		< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	NT	NT	NT	NT	NT	NT	NT	NT
Carbon tetrachloride		< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	NT	NT	NT	NT	NT	NT	NT	NT
Tetrachloroethylene (PCE)		< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	3.1	0.45	4.8	0.71	< 1.4	< 0.20	2.2	0.33

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. EPMM = Exposure Pathway Mitigation Measure.
5. NT= Not tested
6. Highlighted sample indicates most recent sampling round.

Qualifying Note:

- J The reported result is below the laboratory reporting limit and is estimated.

Table 1 - Chemical Testing Results - Pre- and Post-EPMM Indoor Air
19-19A Morton Street
Somerville, Massachusetts

		Post-EPEM 19-19A Morton Street (cont.)							
		19MORT-1 3/2/12		19MORT-B 3/2/12		19MORT-1 2/27/25		19MORT-B 2/27/25	
		µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
Analyte	Method								
Volatile Organic Compounds (VOCs)	TO-15								
1,2-Dichloroethane		NT	NT	NT	NT	NT	NT	NT	NT
Carbon tetrachloride		NT	NT	NT	NT	NT	NT	NT	NT
Tetrachloroethylene (PCE)		< 1.4	< 0.20	1.0 J	0.15 J	0.136	0.02	0.142	0.021

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. EPMM = Exposure Pathway Mitigation Measure.
5. NT= Not tested
6. Highlighted sample indicates most recent sampling round.

Qualifying Note:

- J The reported result is below the laboratory reporting limit and is estimated.

Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2511786**Report Date:** 03/13/25**SAMPLE RESULTS**

Lab ID: L2511786-01
 Client ID: 045163-19MORT-1
 Sample Location: SOMERVILLE, MA

Date Collected: 02/27/25 10:52
 Date Received: 03/03/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/11/25 20:18
 Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.020	0.020	--	0.136	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	85		60-140
bromochloromethane	87		60-140
chlorobenzene-d5	90		60-140



Project Name: TUFTS ST**Lab Number:** L2511786**Project Number:** 045163**Report Date:** 03/13/25**SAMPLE RESULTS**

Lab ID: L2511786-02
 Client ID: 045163-19MORT-B
 Sample Location: SOMERVILLE, MA

Date Collected: 02/27/25 10:55
 Date Received: 03/03/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/11/25 20:57
 Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.021	0.020	--	0.142	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	82		60-140
bromochloromethane	85		60-140
chlorobenzene-d5	86		60-140





Consulting
Engineers and
Scientists

February 19, 2025
Project 04516-3

James Veneziano
PO Box 556
Somerville, MA 02143

Dear Mr. Veneziano:

**Re: Indoor Air Sampling
21 Morton Street (aka 156 Glen Street)
Somerville, Massachusetts**

Thank you for permitting GEI to conduct indoor air and soil vapor sampling at your property located at 21 Morton Street (aka 156 Glen Street) in Somerville, Massachusetts. Following sampling, we are providing you with a "Notice of Environmental Sampling Form (BWSC-123)," as required by the Massachusetts Department of Environmental Protection (MassDEP). We will also provide you with the results of the indoor air sampling after they are available from the analytical laboratory.

Thank you for your continued assistance. Please contact me at 781-721-4012 or igladstone@geiconsultants.com, if you have any questions.

Sincerely,

GEI CONSULTANTS, INC.

A blue ink signature of Ileen S. Gladstone, consisting of a series of loops and a long horizontal stroke.

Ileen S. Gladstone, P.E., LSP, LEED AP
Senior Vice President

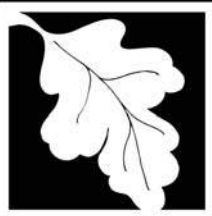
A blue ink signature of Christopher Coner, featuring a stylized, cursive script.

Christopher Coner, CHMM
Project Manager

JWG/:jam
Enclosure

c: Catherine Malagrida, UniFirst Corporation
MassDEP-NERO (as part of Status Report)

B:\Private\04516\2.0 Correspondence\2.4 Residences\Individual Residences\Morton Street\21 Morton\2025 Sampling Letters\21 Morton NOS Ltr Feb 2025.docx



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

3 - 23246

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: 50 Tufts Street
City/Town: Somerville, MA Zip Code: 02145-4129

B. This notice is being provided to the following party:

1. Name: James M Veneziano Trustee
2. Street Address: PO Box 556
City/Town: Somerville, MA Zip Code: 02143

C. This notice is being given to inform its recipient (the party listed in Section B):

- ☒ 1. That environmental sampling ~~will be~~/has been conducted at property owned by the recipient of this notice.
- ☐ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.
- ☐ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling ~~will be~~/has been conducted:

1. Street Address: 21 Morton Street (aka 156 Glen)
City/Town: Somerville, MA Zip Code: 02145-4135
2. MCP phase of work during which the sampling ~~will be~~/has been conducted:
- | | |
|---|--|
| ☐ Immediate Response Action | ☐ Phase III Feasibility Evaluation |
| ☐ Release Abatement Measure | ☐ Phase IV Remedy Implementation Plan |
| ☐ Utility-related Abatement Measure | ☒ Phase V/Remedy Operation Status |
| ☐ Phase I Initial Site Investigation | ☐ Post-Temporary Solution Operation, Maintenance and Monitoring |
| ☐ Phase II Comprehensive Site Assessment | ☐ Other _____ |
- (specify)
3. Description of property where sampling ~~will be~~/has been conducted:
- ☒ residential ☐ commercial ☐ industrial ☐ school/playground ☐ Other _____
- (specify)
4. Description of the sampling locations and types (e.g., soil, groundwater, indoor air, soil gas) to the extent known at the time of this notice.
- Indoor air and soil vapor sampling

E. Contact information related to the party providing this notice:

Contact Name: Ileen Gladstone, P.E., LSP, LEED AP
Street Address: GEI Consultants, Inc., 400 Unicorn Park Drive
City/Town: Woburn, MA Zip Code: 01801-3341
Telephone: (781) 721-4012 Email: igladstone@geiconsultants.com



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

3

- 23246

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation of a release for which a notification to MassDEP has been made under the Massachusetts Contingency Plan (310 CMR 40.0300) on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at <http://www.mass.gov/eea/agencies/massdep/cleanup>. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See <http://public.dep.state.ma.us/SearchableSites2/Search.aspx> to view site-specific files on-line or <http://mass.gov/eea/agencies/massdep/about/contacts/conduct-a-file-review.html> if you would like to make an appointment to see these files in person. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

March 27, 2025
Project 045163

James Veneziano
PO Box 556
Somerville, MA 02143

**Re: Indoor Air and Sub-Slab Soil Vapor Sampling Results
21 Morton Street (aka 156 Glen Street)
Somerville, Massachusetts**

Dear Mr. Veneziano:

On behalf of the UniFirst Corporation, GEI Consultants, Inc. collected indoor air and sub-slab soil vapor samples on February 19, 2025, at your property at 21 Morton Street (aka 156 Glen Street) to evaluate the potential for vapor intrusion.

On February 19, 2025, one indoor air sample was collected on the first floor and one indoor air sample was collected in the basement of both the 21 Morton and 156 Glen Street portions of the residence (a total of four samples). The samples were collected over a 24-hour period. Attached is a summary table of the chemicals detected in the indoor air samples (Tables 1 and 2), and the laboratory data sheets for the recent sampling.

No chlorinated volatile organic compounds (CVOCs) were detected in the samples above the laboratory reporting limit.

On February 19, 2025, GEI installed two soil vapor sampling points and collected two soil vapor samples from the basement of 21 Morton Street and installed one soil vapor sampling point and collected one soil vapor sample from the basement of 156 Glen Street to evaluate the concentrations of chlorinated VOCs in soil vapor beneath the building. Attached is a summary table of the chemicals detected in the soil vapor samples (Tables 3 and 4) and the laboratory data sheets for the recent sampling.

Tetrachloroethylene (PCE) was detected in both samples at 21 Morton Street, 2.28 micrograms per meter cubed ($\mu\text{g}/\text{m}^3$) and $4.73 \mu\text{g}/\text{m}^3$ in SV1 and SV2, respectively. PCE was detected in the one sample at 156 Glen Street, $1.93 \mu\text{g}/\text{m}^3$. 1,1,1-Trichloroethane was detected in both samples at 21 Morton Street, $0.671 \mu\text{g}/\text{m}^3$ and $15.4 \mu\text{g}/\text{m}^3$ in SV1 and SV2, respectively. Trichloroethylene (TCE) was detected in the one sample at 156 Glen Street, $0.145 \mu\text{g}/\text{m}^3$.

The detected indoor air and soil vapor concentrations are below the applicable MassDEP residential and commercial indoor air threshold values and soil vapor screening values. Soil vapor concentrations that are below the soil vapor screening values generally indicate that the vapor intrusion pathway is unlikely to be of concern under current conditions.

Individuals and public officials may request additional public involvement activities under the Massachusetts Contingency Plan (MCP; 310 CMR 40.1403(9) and 40.1404). The property owner may also request additional documentation, such as that listed at 310 CMR 40.0017(3), associated with the above-referenced samples. We will provide such additional documentation within 30 days of our receipt of such a request.

We appreciate your continued cooperation throughout the sampling process. If you have any questions regarding the sampling results, please do not hesitate to contact me at 781.721.4012 or igladstone@geiconsultants.com.

Sincerely,

GEI Consultants, Inc

A blue ink signature of Ileen S. Gladstone, consisting of a large, stylized 'G' followed by a horizontal line.

Ileen S. Gladstone, P.E, LSP
Senior Vice President

A black ink signature of Christopher O. Coner, written in a cursive style.

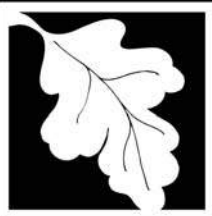
Christopher O. Coner, CHMM
Project Manager

JWG/MEF:jam

B:\Private\04516\2.0 Correspondence\2.4 Residences\Individual Residences\Morton Street\21 Morton\2025 Sampling Letters\February Results\21 Morton Feb Results Ltr.docx

Attachments

cc: Catherine Malagrida, UniFirst Corporation
MassDEP via Status Report



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

3 - 23246

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: 50 Tufts Street
City/Town: Somerville, MA Zip Code: 02145-4129

B. This notice is being provided to the following party:

1. Name: James M Veneziano Trustee
2. Street Address: PO Box 556
City/Town: Somerville, MA Zip Code: 02143

C. This notice is being given to inform its recipient (the party listed in Section B):

- ☒ 1. That environmental sampling ~~will be~~/has been conducted at property owned by the recipient of this notice.
- ☐ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.
- ☐ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling ~~will be~~/has been conducted:

1. Street Address: 21 Morton Street (aka 156 Glen)
City/Town: Somerville, MA Zip Code: 02145-4135
2. MCP phase of work during which the sampling ~~will be~~/has been conducted:
- | | |
|---|--|
| ☐ Immediate Response Action | ☐ Phase III Feasibility Evaluation |
| ☐ Release Abatement Measure | ☐ Phase IV Remedy Implementation Plan |
| ☐ Utility-related Abatement Measure | ☒ Phase V/Remedy Operation Status |
| ☐ Phase I Initial Site Investigation | ☐ Post-Temporary Solution Operation, Maintenance and Monitoring |
| ☐ Phase II Comprehensive Site Assessment | ☐ Other _____ |
- (specify)
3. Description of property where sampling ~~will be~~/has been conducted:
- ☒ residential ☐ commercial ☐ industrial ☐ school/playground ☐ Other _____
- (specify)
4. Description of the sampling locations and types (e.g., soil, groundwater, indoor air, soil gas) to the extent known at the time of this notice.
- Indoor air and soil vapor sampling

E. Contact information related to the party providing this notice:

Contact Name: Ileen Gladstone, P.E., LSP, LEED AP
Street Address: GEI Consultants, Inc., 400 Unicorn Park Drive
City/Town: Woburn, MA Zip Code: 01801-3341
Telephone: (781) 721-4012 Email: igladstone@geiconsultants.com



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

3

- 23246

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

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THE PERSON(S) PROVIDING THIS NOTICE

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PURPOSE OF THIS NOTICE

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Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

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Table 1
Chemical Testing Results - Indoor Air
21 Morton Street
Somerville, Massachusetts

		21 Morton Street													
		21MORT-1		21MORT-B		21MORT-B		21MORT-1		21MORT-B		21MORT-FF1		21MORT-B1	
		5/15/07		5/15/07		9/17/08		1/13/09		1/13/09		2/19/25		2/19/25	
		Units:													
Analyte	Method	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
Volatile Organic Compounds (VOCs)	TO-15	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	0.63 J	0.10 J	NT	NT	NT	NT
Carbon tetrachloride															

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. "<" = The analyte was not detected at a concentration above the specified laboratory reporting limit.
5. NT= the analyte was not sampled for

Qualifying Note:

- J The reported result is below the laboratory reporting limit and is estimated.

Table 2
Chemical Testing Results - Indoor Air
156 Glen Street
Somerville, Massachusetts

Location Name: Sample Name: Sample Date: Units:			156 Glen Street															
			156GLEN-1		156GLEN-B		156GLEN-1		156GLEN-B		156GLEN-1		156GLEN-B		156GLEN-FF1		156GLEN-B1	
			5/15/07		5/15/07		9/17/08		9/17/08		1/13/09		1/13/09		2/19/25		2/19/25	
			µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
Analyte	Method	MassDEP Residential Threshold Values																
Volatile Organic Compounds (VOCs)	TO-15																	
Carbon tetrachloride		0.54	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	0.63 J	0.10 J	0.69 J	0.11 J	NT	NT	NT	NT
Dichloroethane, 1,2-		0.09	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	0.38 J	0.095 J	< 0.81	< 0.20	NT	NT	NT	NT
Tetrachloroethylene (PCE)		1.4	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	0.62 J	0.091 J	<0.136	<0.020	<0.136	<0.020

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. "<" = The analyte was not detected at a concentration above the specified laboratory reporting limit.
5. NT= the analyte was not sampled for

Qualifying Note:

- J The reported result is below the laboratory reporting limit and is estimated.

Table 3
Summary of Sub-Slab Soil Vapor Testing Results
21 Morton Street
Somerville, Massachusetts

Sample Location: Sample Name: Sample Date: Collected by: Units:	21 Morton Street							
	045162-21 Mort-SS1A		045162-21 Mort-SS2A		045163-21MORT-SV1		045163-21MORT-SV2	
	3/28/07		3/28/07		2/19/25		2/19/25	
	GEI		GEI		GEI		GEI	
	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv
Analyte								
Volatile Organic Compounds (VOCs)								
Tetrachloroethylene (PCE)	3.1	0.45	14	2.0	2.28	0.336	4.73	0.698
1,1,1-Trichloroethane	0.65 J	0.12 J	154	28.2	0.671	0.123	15.4	2.82

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.

Qualifying Note:

J The reported result is below the laboratory reporting limit and is estimated.

Table 4
Summary of Sub-Slab Soil Vapor Testing Results
156 Glen Street
Somerville, Massachusetts

	Sample Location:	156 Glen Street			
	Sample Name:	045162-156 GLEN-SS2		045162-156GLEN-SV2	
	Sample Date:	3/15/2007		2/19/2025	
	Units:	µg/m ³	ppbv	µg/m ³	ppbv
Analyte					
Volatile Organic Compounds (VOCs)					
Trichloroethylene (TCE)		<1.1	<0.20	0.145	0.027
Tetrachloroethylene (PCE)		<1.4	<0.20	1.93	0.284
1,1,1-Trichloroethane		10	1.9	<0.109	<0.020

General Notes

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.

Project Name: TUFTS ST**Lab Number:** L2509944**Project Number:** 045163**Report Date:** 03/11/25**SAMPLE RESULTS**

Lab ID: L2509944-01
 Client ID: 045163-21MORT-FF1
 Sample Location: SOMERVILLE,MA

Date Collected: 02/19/25 11:01
 Date Received: 02/21/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/04/25 02:34
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	79		60-140
bromochloromethane	88		60-140
chlorobenzene-d5	83		60-140



Project Name: TUFTS ST**Lab Number:** L2509944**Project Number:** 045163**Report Date:** 03/11/25**SAMPLE RESULTS**

Lab ID: L2509944-02
 Client ID: 045163-21MORT-B1
 Sample Location: SOMERVILLE,MA

Date Collected: 02/19/25 11:05
 Date Received: 02/21/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/04/25 03:12
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	78		60-140
bromochloromethane	88		60-140
chlorobenzene-d5	81		60-140



Project Name: TUFTS ST**Lab Number:** L2509944**Project Number:** 045163**Report Date:** 03/11/25**SAMPLE RESULTS**

Lab ID: L2509944-03
 Client ID: 045163-156GLEN-FF1
 Sample Location: SOMERVILLE,MA

Date Collected: 02/19/25 11:09
 Date Received: 02/21/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/04/25 03:50
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	85		60-140
bromochloromethane	89		60-140
chlorobenzene-d5	91		60-140



Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2509944**Report Date:** 03/11/25**SAMPLE RESULTS**

Lab ID: L2509944-04
 Client ID: 045163-156GLEN-B1
 Sample Location: SOMERVILLE,MA

Date Collected: 02/19/25 11:13
 Date Received: 02/21/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/04/25 04:28
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	74		60-140
bromochloromethane	88		60-140
chlorobenzene-d5	80		60-140



Project Name: TUFTS ST**Lab Number:** L2509944**Project Number:** 045163**Report Date:** 03/11/25**SAMPLE RESULTS**

Lab ID: L2509944-05
 Client ID: 045163-21MORT-SV1
 Sample Location: SOMERVILLE,MA

Date Collected: 02/19/25 13:15
 Date Received: 02/21/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil_Vapor
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/09/25 06:06
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	0.123	0.020	--	0.671	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.336	0.020	--	2.28	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	87		60-140
bromochloromethane	94		60-140
chlorobenzene-d5	96		60-140



Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2509944**Report Date:** 03/11/25**SAMPLE RESULTS**

Lab ID: L2509944-06
 Client ID: 045163-21MORT-SV2
 Sample Location: SOMERVILLE,MA

Date Collected: 02/19/25 13:30
 Date Received: 02/21/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil_Vapor
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/09/25 06:44
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	2.82	0.020	--	15.4	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.698	0.020	--	4.73	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	89		60-140
bromochloromethane	96		60-140
chlorobenzene-d5	97		60-140



Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2509944**Report Date:** 03/11/25**SAMPLE RESULTS**

Lab ID: L2509944-07
 Client ID: 045163-156GLEN-SV1
 Sample Location: SOMERVILLE,MA

Date Collected: 02/19/25 14:23
 Date Received: 02/21/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil_Vapor
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/09/25 22:33
 Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	0.027	0.020	--	0.145	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.284	0.020	--	1.93	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	92		60-140
bromochloromethane	95		60-140
chlorobenzene-d5	96		60-140





Consulting
Engineers and
Scientists

February 19, 2025
Project 04516-3

Ms. Eliza Datta
31 Tufts Street/Glen Pocket Park LLC
40 Homer Street
Newton, MA 02459

Ms. Eliza Datta:

**Re: Indoor Air and Soil Vapor Sampling
31 Tufts Street
Somerville, Massachusetts**

Thank you for permitting GEI to conduct indoor air and soil vapor sampling at your property located at 31 Tufts Street in Somerville, Massachusetts. Following sampling, we are providing you with a "Notice of Environmental Sampling Form (BWSC-123)," as required by the Massachusetts Department of Environmental Protection (MassDEP). We will also provide you with the results of the indoor air and soil vapor sampling after they are available from the analytical laboratory.

Thank you for your continued assistance. Please contact me at 781-721-4012 or igladstone@geiconsultants.com, if you have any questions.

Sincerely,

GEI CONSULTANTS, INC.

A blue ink signature of Ileen S. Gladstone, consisting of a series of loops and a long horizontal stroke.

Ileen S. Gladstone, P.E., LSP, LEED AP
Senior Vice President

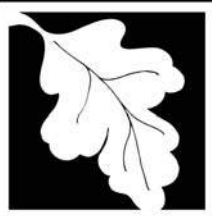
A blue ink signature of Christopher Coner, written in a cursive style.

Christopher Coner, CHMM
Project Manager

JWG/:jam
Enclosure

c: Catherine Malagrida, UniFirst Corporation
MassDEP-NERO (as part of Status Report)

B:\Private\04516\2.0 Correspondence\2.4 Residences\Individual Residences\Tufts Street\31 Tufts Street\Feb 2025 Indoor Air Sampling\NOS\31 Tufts Street NOS Ltr Feb 2025.docx



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

3 - 23246

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: 50 Tufts Street
City/Town: Somerville Zip Code: 02145-4129

B. This notice is being provided to the following party:

1. Name: Eliza Datta - 31 Tufts St/Tufts Glen Pocket Park LLC
2. Street Address: 40 Homer Street
City/Town: Newton, MA Zip Code: 02459

C. This notice is being given to inform its recipient (the party listed in Section B):

- ☒ 1. That environmental sampling ~~will be~~/has been conducted at property owned by the recipient of this notice.
- ☐ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.
- ☐ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling ~~will be~~/has been conducted:

1. Street Address: 31 Tufts Street
City/Town: Somerville, MA Zip Code: 02145-4116
2. MCP phase of work during which the sampling ~~will be~~/has been conducted:
- | | |
|---|--|
| ☐ Immediate Response Action | ☐ Phase III Feasibility Evaluation |
| ☐ Release Abatement Measure | ☐ Phase IV Remedy Implementation Plan |
| ☐ Utility-related Abatement Measure | ☒ Phase V/Remedy Operation Status |
| ☐ Phase I Initial Site Investigation | ☐ Post-Temporary Solution Operation, Maintenance and Monitoring |
| ☐ Phase II Comprehensive Site Assessment | ☐ Other _____ |
- (specify)
3. Description of property where sampling ~~will be~~/has been conducted:
- ☒ residential ☐ commercial ☐ industrial ☐ school/playground ☐ Other _____
- (specify)
4. Description of the sampling locations and types (e.g., soil, groundwater, indoor air, soil gas) to the extent known at the time of this notice.
- Indoor Air and Sub-slab soil vapor sampling

E. Contact information related to the party providing this notice:

Contact Name: Ileen Gladstone, P.E., LSP, LEED AP
Street Address: GEI Consultants, Inc., 400 Unicorn Park Drive
City/Town: Woburn, MA Zip Code: 01801-3341
Telephone: (781) 721-4012 Email: igladstone@geiconsultants.com



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

3

- 23246

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation of a release for which a notification to MassDEP has been made under the Massachusetts Contingency Plan (310 CMR 40.0300) on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at <http://www.mass.gov/eea/agencies/massdep/cleanup>. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See <http://public.dep.state.ma.us/SearchableSites2/Search.aspx> to view site-specific files on-line or <http://mass.gov/eea/agencies/massdep/about/contacts/conduct-a-file-review.html> if you would like to make an appointment to see these files in person. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

April 3, 2025
Project 045163

VIA EMAIL: edatta@e3devco.com

Eliza Datta
31 Tufts Street/Glen Pocket Park LLC
40 Homer Street
Newton, MA 02459

**Re: Indoor Air and Soil Vapor Sampling Results
31 Tufts Street
Somerville, Massachusetts**

Dear Ms. Datta:

On behalf of the UniFirst Corporation, GEI Consultants, Inc. collected indoor air and soil vapor samples on February 19, 2025, at your property at 31 Tufts Street to evaluate the potential for vapor intrusion. We are providing you with the sampling results and a "Notice of Environmental Sampling" (Form BWSC-123) as required by the Massachusetts Department of Environmental Protection (MassDEP).

On February 19, 2025, five indoor air samples were collected on the first floor in each of the four units and the utility room. On February 10, 2025, one week prior to sampling, GEI sealed off the vent pipe and the samples were collected with the venting system closed. Attached is a summary table of the chemicals detected in the indoor air samples along with the previous sampling results (Table 1), and the laboratory data sheets for the recent sampling.

Tetrachloroethylene (PCE) was detected in samples IA-2 (Unit 101) at a concentration of 0.359 micrograms per meter cubed ($\mu\text{g}/\text{m}^3$) and IA-3 (utility room) a concentration of 0.231 $\mu\text{g}/\text{m}^3$. Trans-1,2-dichloroethylene (trans-1,2-DCE) was detected in sample IA-1 (Unit 104) at a concentration of 0.341 $\mu\text{g}/\text{m}^3$.

On February 19, 2025, two soil vapor samples were collected from beneath the building slab in the utility room (SV1) and in the northern stairwell (SV2). The samples were collected over 1 hour. Attached is a summary table of the chemicals detected in the soil vapor samples along with the previous sampling results (Table 2), and the laboratory data sheets for the recent sampling. PCE was detected at concentrations of 31.2 $\mu\text{g}/\text{m}^3$ and 47.9 $\mu\text{g}/\text{m}^3$, at SV1 and SV2, respectively. The following chlorinated VOCs were detected in SV1: 1,1,1-trichloroethane (0.393 $\mu\text{g}/\text{m}^3$) and trichloroethylene (0.478 $\mu\text{g}/\text{m}^3$). The following chlorinated VOCs were detected in SV2: 1,1,1-trichloroethane (3.24 $\mu\text{g}/\text{m}^3$), and trichloroethylene (1.55 $\mu\text{g}/\text{m}^3$). On February 24, 2025, GEI returned to the property to open the passive venting system.

The October 2023, January 2024, September 2024, and February 2025 indoor air sampling results indicate that a condition of NSR exists, but additional evaluation is required. We would like to collect additional rounds of indoor air data to continue to evaluate if the EPMM is required to maintain a level of NSR. The next round of indoor air sampling will be conducted in spring/summer 2025 with the vent pipe closed.

Individuals and public officials may request additional public involvement activities under the Massachusetts Contingency Plan (MCP; 310 CMR 40.1403(9) and 40.1404). The property owner also may request additional documentation, such as that listed at 310 CMR 40.0017(3), associated with the above-referenced samples. We will provide such additional documentation within 30 days of our receipt of such a request.

We appreciate your continued cooperation throughout the sampling process. If you have any questions regarding the sampling results, please do not hesitate to contact me at 781.721.4012 or igladstone@geiconsultants.com.

Sincerely,

GEI Consultants, Inc



Ileen S. Gladstone, P.E, LSP
Senior Vice President



Christopher O. Coner, CHMM
Project Manager

JWG/MEF:jam

B:\Private\04516\2.0 Correspondence\2.4 Residences\Individual Residences\Tufts Street\31 Tufts Street\3. Feb 2025 Indoor Air Sampling\Results\31Tufts Feb 2025 Results Letter.docx

Attachments

cc: Catherine Malagrida, UniFirst Corporation
MassDEP via Status Report



**Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup**

BWSC123

This Notice is Related to:
Release Tracking Number

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

3 - 23246

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: 50 Tufts Street
City/Town: Somerville Zip Code: 02145-4129

B. This notice is being provided to the following party:

1. Name: Eliza Datta - 31 Tufts St/Tufts Glen Pocket Park LLC
2. Street Address: 40 Homer Street
City/Town: Newton, MA Zip Code: 02459

C. This notice is being given to inform its recipient (the party listed in Section B):

- ☒ 1. That environmental sampling ~~will be~~/has been conducted at property owned by the recipient of this notice.
- ☒ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.
- ☒ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling ~~will be~~/has been conducted:

1. Street Address: 31 Tufts Street
City/Town: Somerville, MA Zip Code: 02145-4116
2. MCP phase of work during which the sampling ~~will be~~/has been conducted:
- | | |
|---|--|
| ☐ Immediate Response Action | ☐ Phase III Feasibility Evaluation |
| ☐ Release Abatement Measure | ☐ Phase IV Remedy Implementation Plan |
| ☐ Utility-related Abatement Measure | ☒ Phase V/Remedy Operation Status |
| ☐ Phase I Initial Site Investigation | ☐ Post-Temporary Solution Operation, Maintenance and Monitoring |
| ☐ Phase II Comprehensive Site Assessment | ☐ Other _____ |
- (specify)
3. Description of property where sampling ~~will be~~/has been conducted:
- ☒ residential ☐ commercial ☐ industrial ☐ school/playground ☐ Other _____
- (specify)
4. Description of the sampling locations and types (e.g., soil, groundwater, indoor air, soil gas) to the extent known at the time of this notice.
- Indoor Air and Sub-slab soil vapor sampling

E. Contact information related to the party providing this notice:

Contact Name: Ileen Gladstone, P.E., LSP, LEED AP
Street Address: GEI Consultants, Inc., 400 Unicorn Park Drive
City/Town: Woburn, MA Zip Code: 01801-3341
Telephone: (781) 721-4012 Email: igladstone@geiconsultants.com



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

3

- 23246

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation of a release for which a notification to MassDEP has been made under the Massachusetts Contingency Plan (310 CMR 40.0300) on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at <http://www.mass.gov/eea/agencies/massdep/cleanup>. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See <http://public.dep.state.ma.us/SearchableSites2/Search.aspx> to view site-specific files on-line or <http://mass.gov/eea/agencies/massdep/about/contacts/conduct-a-file-review.html> if you would like to make an appointment to see these files in person. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Table 1. Chemical Testing Results - Indoor Air
31 Tufts Street
Somerville, Massachusetts

Sample Property: Sample Name: Sample Location: Sample Date: Collected By: Vent Status:			31 Tufts Street															
			31TUFT-IA1				31TUFT-IA2				31TUFT-IA3				31TUFT-IA4		31TUFT-IA5	
			Unit 104				Unit 101				Utility				Unit 103		Unit 102	
			10/17/2023	1/31/2024	9/6/2024	2/19/2025	10/17/2023	1/31/2024	9/6/2024	2/19/2025	10/17/2023	1/31/2024	9/6/2024	2/19/2025	9/6/2024	2/19/2025	9/6/2024	2/19/2025
			GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI
			Open	Open	Open	Closed	Open	Open	Open	Closed	Open	Open	Open	Closed	Open	Closed	Open	Closed
Analyte	Method	Units																
Volatile Organic Compounds (VOCs)	TO-15	µg/m ³																
1,1-Dichloroethane			<0.081	<0.081	0.134	<0.081	<0.081	<0.081	<0.081	<0.081	<0.081	<0.081	<0.081	<0.081	<0.081	<0.081	<0.081	<0.081
1,1-Dichloroethene			<0.079	<0.079	<0.079	<0.079	<0.079	<0.079	<0.079	<0.079	<0.079	<0.079	<0.079	<0.079	<0.079	<0.079	<0.079	<0.079
cis-1,2-Dichloroethene			<0.079	<0.079	<0.079	<0.079	<0.079	<0.079	<0.079	<0.079	<0.079	<0.079	<0.079	<0.079	<0.079	<0.079	<0.079	<0.079
trans-1,2-Dichloroethene			<0.079	0.103	0.139	0.341	<0.079	<0.079	0.139	<0.079	<0.079	<0.079	0.147	<0.079	0.119	<0.079	0.167	<0.079
Tetrachloroethene			<0.136	<0.136	0.604	<0.136	0.203	<0.136	<0.136	0.359	0.176	<0.136	0.210	0.231	<0.136	<0.136	0.142	<0.136
1,1,2,2 Tetrachloroethane			<0.137	<0.137	<0.137	<0.137	<0.137	<0.137	<0.137	<0.137	<0.137	<0.137	<0.137	<0.137	<0.137	<0.137	<0.137	<0.137
1,1,2 Trichloroethane			<0.109	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109
1,1,1-Trichloroethane			<0.109	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109
Trichloroethene			<0.107	<0.107	<0.107	<0.107	<0.107	<0.107	<0.107	<0.107	<0.107	<0.107	<0.107	<0.107	<0.107	<0.107	<0.107	<0.107
Vinyl chloride			<0.051	<0.051	<0.051	<0.051	<0.051	<0.051	<0.051	<0.051	<0.051	<0.051	<0.051	<0.051	<0.051	<0.051	<0.051	<0.051

General Notes

1. Analytes detected above the laboratory reporting limit are reported here. For a complete list of analytes see the laboratory data sheets.
2. µg/m3 = micrograms per cubic meter.
3. Residential Threshold Values are cited from "Vapor Intrusion Guidance WSC#16-435" from the Massachusetts Department of Environmental Protection dated October 2016.
4. During the February 2025 sampling the vent pipe was closed for one week prior to sampling.

Table 2. Chemical Testing Results - Sub Slab Soil Vapor

31 Tufts Street

Somerville, Massachusetts

Sample Property: Sample Name: Sample Date: Collected By: Vent Status:			31 Tufts Street							
			31TUFT-SV1				31TUFT-SV2			
			10/17/2023	1/31/2024	9/6/2024	2/19/2025	10/27/2023	1/31/2024	9/6/2024	2/19/2025
			GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI
			Open	Open	Open	Closed	Open	Open	Open	Closed
	Method	Units								
Volatile Organic Compounds (VOCs)	TO-15 SIM	µg/m ³								
1,1-Dichloroethane			<0.162	<0.081	0.356	<0.081	<0.081	<0.081	0.546	<0.081
1,1-Dichloroethene			<0.159	<0.079	0.174	<0.079	<0.079	<0.079	<0.079	<0.079
cis-1,2-Dichloroethene			<0.159	<0.079	<0.079	<0.079	<0.079	0.270	0.083	<0.079
trans-1,2-Dichloroethene			<0.159	<0.079	0.083	<0.079	0.119	<0.079	<0.079	<0.079
Tetrachloroethene			58.7	31.5	94.9	31.2	59.1	77.3	61.4	47.9
1,1,2,2-Tetrachloroethane			<0.275	<0.137	<0.137	<0.137	1.4	<0.137	<0.137	<0.137
1,1,2-Trichloroethane			<0.218	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109
1,1,1-Trichloroethane			2.87	0.786	7.47	0.393	8.95	9.82	14.60	3.24
Trichloroethene			1.38	<0.107	2.09	0.478	2.41	2.42	4.58	1.55

General Notes

1. Analytes detected above the laboratory reporting limit are reported here. For a complete list of analytes see the laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. Residential Screening Values are cited from "Vapor Intrusion Guidance WSC#16-435" from the Massachusetts Department of Environmental Protection dated October 2016.
4. During the February 2025 sampling the vent pipe was closed for one week prior to sampling.

Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2509935**Report Date:** 03/10/25**SAMPLE RESULTS**

Lab ID: L2509935-01
 Client ID: 045163-31TUFT-IA1
 Sample Location: SOMERVILLE,MA

Date Collected: 02/19/25 10:18
 Date Received: 02/21/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 02/28/25 21:55
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	0.086	0.020	--	0.341	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	92		60-140
bromochloromethane	99		60-140
chlorobenzene-d5	93		60-140



Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2509935
Report Date: 03/10/25

SAMPLE RESULTS

Lab ID: L2509935-02
 Client ID: 045163-31TUFT-IA2
 Sample Location: SOMERVILLE,MA

Date Collected: 02/19/25 10:07
 Date Received: 02/21/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 02/28/25 22:39
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.053	0.020	--	0.359	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	93		60-140
bromochloromethane	99		60-140
chlorobenzene-d5	96		60-140



Project Name: TUFTS ST**Lab Number:** L2509935**Project Number:** 045163**Report Date:** 03/10/25**SAMPLE RESULTS**

Lab ID: L2509935-03
 Client ID: 045163-31TUFT-IA3
 Sample Location: SOMERVILLE,MA

Date Collected: 02/19/25 10:04
 Date Received: 02/21/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 02/28/25 23:25
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.034	0.020	--	0.231	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	91		60-140
bromochloromethane	97		60-140
chlorobenzene-d5	94		60-140



Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2509935**Report Date:** 03/10/25**SAMPLE RESULTS**

Lab ID: L2509935-04
 Client ID: 045163-31TUFT-IA4
 Sample Location: SOMERVILLE,MA

Date Collected: 02/19/25 10:14
 Date Received: 02/21/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/01/25 00:09
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	91		60-140
bromochloromethane	97		60-140
chlorobenzene-d5	94		60-140



Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2509935**Report Date:** 03/10/25**SAMPLE RESULTS**

Lab ID: L2509935-05
 Client ID: 045163-31TUFT-IA5
 Sample Location: SOMERVILLE,MA

Date Collected: 02/19/25 10:12
 Date Received: 02/21/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/01/25 01:40
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	89		60-140
bromochloromethane	96		60-140
chlorobenzene-d5	93		60-140



Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2509935**Report Date:** 03/10/25**SAMPLE RESULTS**

Lab ID: L2509935-06
 Client ID: 045163-31TUFT-SV1
 Sample Location: SOMERVILLE,MA

Date Collected: 02/19/25 11:24
 Date Received: 02/21/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil_Vapor
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/09/25 04:51
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	0.072	0.020	--	0.393	0.109	--		1
Trichloroethene	0.089	0.020	--	0.478	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	4.60	0.020	--	31.2	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	90		60-140
bromochloromethane	100		60-140
chlorobenzene-d5	94		60-140



Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2509935**Report Date:** 03/10/25**SAMPLE RESULTS**

Lab ID: L2509935-07
 Client ID: 045163-31TUFT-SV2
 Sample Location: SOMERVILLE,MA

Date Collected: 02/19/25 11:30
 Date Received: 02/21/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil_Vapor
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/09/25 05:28
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	0.594	0.020	--	3.24	0.109	--		1
Trichloroethene	0.289	0.020	--	1.55	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	7.06	0.020	--	47.9	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	89		60-140
bromochloromethane	95		60-140
chlorobenzene-d5	96		60-140





Consulting
Engineers and
Scientists

February 26, 2025
Project 04516-3

Sara Peddle
32 Knowlton Street
Somerville, MA 02145

Dear Ms. Peddle:

**Re: Indoor Air Sampling
32 Knowlton Street
Somerville, Massachusetts**

Thank you for permitting GEI to conduct indoor air sampling at your property located at 32 Knowlton Street in Somerville, Massachusetts. Prior to sampling, we are providing you with a "Notice of Environmental Sampling Form (BWSC-123)," as required by the Massachusetts Department of Environmental Protection (MassDEP). We will also provide you with the results of the indoor air sampling after they are available from the analytical laboratory.

Thank you for your continued assistance. Please contact me at 781-721-4012 or igladstone@geiconsultants.com, if you have any questions.

Sincerely,

GEI CONSULTANTS, INC.

A blue ink signature of Ileen S. Gladstone, consisting of a large, stylized 'G' followed by a long, horizontal, wavy line.

Ileen S. Gladstone, P.E., LSP, LEED AP
Senior Vice President

A blue ink signature of Christopher Coner, featuring a stylized 'C' followed by a series of loops and a final horizontal stroke.

Christopher Coner, CHMM
Project Manager

JWG/:jam

Enclosure

c: Catherine Malagrida, UniFirst Corporation
MassDEP-NERO (as part of Status Report)

B:\Private\04516\2.0 Correspondence\2.4 Residences\Individual Residences\Knowlton Street\32 Knowlton\2025 Sampling Letters\32 Knowlton Street NOS Ltr Feb 2025.docx

April 3, 2025
Project 045163

Ms. Sara Peddle
32 Knowlton Street
Somerville, MA 02143

**Re: Indoor Air Sampling Results
32 Knowlton Street, Somerville, Massachusetts**

Dear Ms. Peddle:

On behalf of the UniFirst Corporation, GEI Consultants, Inc. collected indoor air samples on February 28, 2025, at your property at 32 Knowlton Street to evaluate the potential for vapor intrusion.

On February 28, 2025, one indoor air sample was collected in the basement and one sample was collected on the first floor. The samples were collected over a 24-hour period. Attached is a summary table of the chemicals detected in the indoor air samples (Table 1), and the laboratory data sheets for the recent sampling.

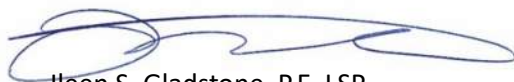
Tetrachloroethylene (PCE) was detected in two samples. Concentrations of PCE were detected at 0.163 micrograms per meter cubed ($\mu\text{g}/\text{m}^3$) on the first floor and 0.136 $\mu\text{g}/\text{m}^3$ in the basement.

The detected indoor air concentrations are below the applicable MassDEP residential and commercial indoor air threshold values.

Individuals and public officials may request additional public involvement activities under the Massachusetts Contingency Plan (MCP; 310 CMR 40.1403(9) and 40.1404). The property owner may also request additional documentation, such as that listed at 310 CMR 40.0017(3), associated with the above-referenced samples. We will provide such additional documentation within 30 days of our receipt of such a request.

We appreciate your continued cooperation throughout the sampling process. If you have any questions regarding the sampling results, please do not hesitate to contact me at 781.721.4012 or igladstone@geiconsultants.com.

GEI Consultants, Inc



Ileen S. Gladstone, P.E, LSP
Senior Vice President



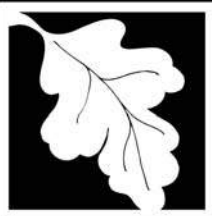
Christopher O. Coner, CHMM
Project Manager

NMT/MEF:jam

B:\Private\04516\2.0 Correspondence\2.4 Residences\Individual Residences\Knowlton Street\32 Knowlton\2025 Sampling Letters\February 2025 Results\32 Knowlton Feb Results Ltr.docx

Attachments

cc: Catherine Malagrida, UniFirst Corporation
MassDEP via Status Report



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

3 - 23246

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: 50 Tufts Street
City/Town: Somerville, MA Zip Code: 02145-4129

B. This notice is being provided to the following party:

1. Name: Sara Peddle
2. Street Address: 32 Knowlton Street
City/Town: Somerville, MA Zip Code: 02145

C. This notice is being given to inform its recipient (the party listed in Section B):

- ☒ 1. That environmental sampling ~~will be~~/has been conducted at property owned by the recipient of this notice.
- ☒ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.
- ☒ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling ~~will be~~/has been conducted:

1. Street Address: 32 Knowlton Street
City/Town: Somerville, MA Zip Code: 02145-4135
2. MCP phase of work during which the sampling ~~will be~~/has been conducted:
- | | |
|---|--|
| ☐ Immediate Response Action | ☐ Phase III Feasibility Evaluation |
| ☐ Release Abatement Measure | ☐ Phase IV Remedy Implementation Plan |
| ☐ Utility-related Abatement Measure | ☒ Phase V/Remedy Operation Status |
| ☐ Phase I Initial Site Investigation | ☐ Post-Temporary Solution Operation, Maintenance and Monitoring |
| ☐ Phase II Comprehensive Site Assessment | ☐ Other _____ |
- (specify)
3. Description of property where sampling ~~will be~~/has been conducted:
- ☒ residential ☐ commercial ☐ industrial ☐ school/playground ☐ Other _____
- (specify)
4. Description of the sampling locations and types (e.g., soil, groundwater, indoor air, soil gas) to the extent known at the time of this notice.

Indoor air sampling

E. Contact information related to the party providing this notice:

Contact Name: Ileen Gladstone, P.E., LSP, LEED AP
Street Address: GEI Consultants, Inc., 400 Unicorn Park Drive
City/Town: Woburn, MA Zip Code: 01801-3341
Telephone: (781) 721-4012 Email: igladstone@geiconsultants.com



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

3

- 23246

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation of a release for which a notification to MassDEP has been made under the Massachusetts Contingency Plan (310 CMR 40.0300) on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at <http://www.mass.gov/eea/agencies/massdep/cleanup>. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See <http://public.dep.state.ma.us/SearchableSites2/Search.aspx> to view site-specific files on-line or <http://mass.gov/eea/agencies/massdep/about/contacts/conduct-a-file-review.html> if you would like to make an appointment to see these files in person. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Table 1 - Chemical Testing Results - Pre and Post-EPMM Installation Indoor Air
32 Knowlton Street
Somerville, Massachusetts

Sample Location: Sample Name: Sample Date: Units:		32 Knowlton Street pre-EPMM								32 Knowlton Street Post-EPMM							
		32KNOW-1 10/30/08		32KNOW-B 10/30/08		32KNOW-1 1/16/09		32KNOW-B 1/16/09		32KNOW-1 7/31/09		32KNOW-B 7/31/09		32KNOW-1 1/29/10		32KNOW-B 1/29/10	
		µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
Analyte	Method																
Volatile Organic Compounds (VOCs)	TO-15																
1,2-Dichloroethane		0.49 J	0.12 J	<0.81	<0.20	<0.81	<0.20	<0.81	<0.20	< 0.81	< 0.20	3.0	0.73	< 0.81	< 0.20	< 0.81	< 0.20
Carbon tetrachloride		0.58 J	0.092 J	0.61 J	0.097 J	0.63 J	0.10 J	0.57 J	0.091 J	<1.3	< 0.20	<1.3	< 0.20	<1.3	< 0.20	<1.3	< 0.20
cis-1,2-Dichloroethene		<0.79	<0.20	<0.79	<0.20	<0.79	<0.20	0.59 J	0.15 J	<0.79	< 0.20	<0.79	< 0.20	<0.79	< 0.20	<0.79	< 0.20
Tetrachloroethylene (PCE)		<1.4	<0.20	<1.4	<0.20	5.6	0.82	20	3.0	<1.4	< 0.20	<1.4	< 0.20	<1.4	< 0.20	<1.4	< 0.20
Trichloroethene		<1.1	<0.20	<1.1	<0.20	<1.1	<0.20	0.91 J	0.17 J	<1.1	< 0.20	<1.1	< 0.20	<1.1	< 0.20	<1.1	< 0.20

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. EPMM = Exposure Pathway Mitigation Measure.
5. NT= Not tested
6. Highlighted sample indicates most recent sampling round.

Qualifying Note:

- J The reported result is below the laboratory reporting limit and is estimated.

Table 1 - Chemical Testing Results - Pre and Post-EPMM Installation Indoor Air
32 Knowlton Street
Somerville, Massachusetts

Sample Location:		32 Knowlton Street Post-EPMM (cont.)											
Sample Name:		32KNOW-1 11/19/10		32KNOW-B 11/19/10		32KNOW-1 3/8/11		32KNOW-B 3/8/11		32KNOW-1 2/28/25		32KNOW-B 2/28/25	
Sample Date:													
Units:		µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
Analyte	Method												
Volatile Organic Compounds (VOCs)	TO-15												
1,2-Dichloroethane		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Carbon tetrachloride		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
cis-1,2-Dichloroethene		<0.79	< 0.20	<0.79	< 0.20	<0.79	< 0.20	<0.79	< 0.20	<0.079	<0.020	<0.079	<0.020
Tetrachloroethylene (PCE)		<1.4	< 0.20	<1.4	< 0.20	<1.4	< 0.20	<1.4	< 0.20	0.163	0.024	0.136	0.020
Trichloroethene		<1.1	< 0.20	<1.1	< 0.20	<1.1	< 0.20	<1.1	< 0.20	<0.107	<0.020	<0.107	<0.020

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. EPMM = Exposure Pathway Mitigation Measure.
5. NT= Not tested
6. Highlighted sample indicates most recent sampling round.

Qualifying Note:

- J The reported result is below the laboratory reporting limit and is estimated.

Project Name: TUFTS ST**Lab Number:** L2511801**Project Number:** 045163**Report Date:** 03/13/25**SAMPLE RESULTS**

Lab ID: L2511801-01
 Client ID: 045163-32KNOW-1
 Sample Location: SOMERVILLE, MA

Date Collected: 02/28/25 10:30
 Date Received: 03/03/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/11/25 23:39
 Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.024	0.020	--	0.163	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	80		60-140
bromochloromethane	83		60-140
chlorobenzene-d5	86		60-140



Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2511801**Report Date:** 03/13/25**SAMPLE RESULTS**

Lab ID: L2511801-02
 Client ID: 045163-32KNOW-B
 Sample Location: SOMERVILLE, MA

Date Collected: 02/28/25 10:28
 Date Received: 03/03/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/12/25 00:18
 Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.020	0.020	--	0.136	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	78		60-140
bromochloromethane	82		60-140
chlorobenzene-d5	83		60-140





Consulting
Engineers and
Scientists

February 19, 2025
Project 04516-3

Max Jiang and Matthew Paul Viscue
34 Knowlton Street
Somerville, MA 02145

Dear Ms. Jiang and Mr. Viscue:

**Re: Indoor Air Sampling
34 Knowlton Street
Somerville, Massachusetts**

Thank you for permitting GEI to conduct indoor air sampling at your property located at 34 Knowlton Street in Somerville, Massachusetts. Prior to sampling, we are providing you with a "Notice of Environmental Sampling Form (BWSC-123)," as required by the Massachusetts Department of Environmental Protection (MassDEP). We will also provide you with the results of the indoor air sampling after they are available from the analytical laboratory.

Thank you for your continued assistance. Please contact me at 781-721-4012 or igladstone@geiconsultants.com, if you have any questions.

Sincerely,

GEI CONSULTANTS, INC.

A blue ink signature of Helen S. Gladstone, consisting of a series of loops and a long horizontal stroke.

Helen S. Gladstone, P.E., LSP, LEED AP
Senior Vice President

A blue ink signature of Christopher Coner, featuring a stylized, cursive-like script.

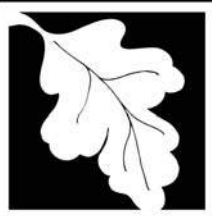
Christopher Coner, CHMM
Project Manager

JWG:jam

Enclosure

c: Catherine Malagrida, UniFirst Corporation
MassDEP-NERO (as part of Status Report)

B:\Private\04516\2.0 Correspondence\2.4 Residences\Individual Residences\Knowlton Street\34 Knowlton\2025 Sampling Letters\34 Knowlton Street NOS Ltr Feb 2025.docx



**Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup**

BWSC123

This Notice is Related to:
Release Tracking Number

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

3 - 23246

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: 50 Tufts Street
City/Town: Somerville, MA Zip Code: 02145-4129

B. This notice is being provided to the following party:

1. Name: Max Jiang and Matthew Paul Viscue
2. Street Address: 34 Knowlton Street
City/Town: Somerville, MA Zip Code: 02145

C. This notice is being given to inform its recipient (the party listed in Section B):

- ☒ 1. That environmental sampling will be ~~has been~~ conducted at property owned by the recipient of this notice.
☐ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.
☐ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be ~~has been~~ conducted:

1. Street Address: 34 Knowlton Street
City/Town: Somerville, MA Zip Code: 02145
2. MCP phase of work during which the sampling will be ~~has been~~ conducted:
- | | |
|---|--|
| ☐ Immediate Response Action | ☐ Phase III Feasibility Evaluation |
| ☐ Release Abatement Measure | ☐ Phase IV Remedy Implementation Plan |
| ☐ Utility-related Abatement Measure | ☒ Phase V/Remedy Operation Status |
| ☐ Phase I Initial Site Investigation | ☐ Post-Temporary Solution Operation, Maintenance and Monitoring |
| ☐ Phase II Comprehensive Site Assessment | ☐ Other _____ |
- (specify)
3. Description of property where sampling will be ~~has been~~ conducted:
☒ residential ☐ commercial ☐ industrial ☐ school/playground ☐ Other _____
(specify)
4. Description of the sampling locations and types (e.g., soil, groundwater, indoor air, soil gas) to the extent known at the time of this notice.

Indoor Air Sampling

E. Contact information related to the party providing this notice:

Contact Name: Ileen Gladstone, P.E., LSP, LEED AP
Street Address: GEI Consultants, Inc., 400 Unicorn Park Drive
City/Town: Woburn, MA Zip Code: 01801-3341
Telephone: (781) 721-4012 Email: igladstone@geiconsultants.com



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

3

- 23246

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation of a release for which a notification to MassDEP has been made under the Massachusetts Contingency Plan (310 CMR 40.0300) on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at <http://www.mass.gov/eea/agencies/massdep/cleanup>. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See <http://public.dep.state.ma.us/SearchableSites2/Search.aspx> to view site-specific files on-line or <http://mass.gov/eea/agencies/massdep/about/contacts/conduct-a-file-review.html> if you would like to make an appointment to see these files in person. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

April 15, 2025
Project 045163

Max Jiang and Matthew Paul Viscue
34 Knowlton Street
Somerville, MA 02145

**Re: Indoor Air Sampling Results
34 Knowlton Street
Somerville, Massachusetts**

Dear Ms. Jiang and Mr. Viscue:

On behalf of the UniFirst Corporation, GEI Consultants, Inc. collected indoor air samples on February 25 and April 9, 2025, at your property at 34 Knowlton Street to evaluate the potential for vapor intrusion.

On February 25, 2025, one indoor air sample was collected in the basement. At the time of sampling, the sample collected from the first floor malfunctioned and was not able to be analyzed. We returned on April 9, 2025, and collected one indoor air sample on the first floor. The samples were collected over a 24-hour period. Attached is a summary table of the chemicals detected in the indoor air samples (Table 1), and the laboratory data sheets for the recent sampling.

Tetrachloroethylene (PCE) was detected in the sample collected on the first floor at a concentration of 0.163 micrograms per meter cubed ($\mu\text{g}/\text{m}^3$). Additionally, trans-1,2-dichloroethylene was detected in both samples at concentrations of 0.127 $\mu\text{g}/\text{m}^3$ on the first floor and 0.135 $\mu\text{g}/\text{m}^3$ in the basement.

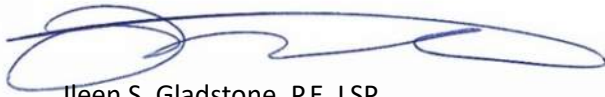
The detected indoor air concentrations are below the applicable MassDEP residential and commercial indoor air threshold values.

Individuals and public officials may request additional public involvement activities under the Massachusetts Contingency Plan (MCP; 310 CMR 40.1403(9) and 40.1404). The property owner may also request additional documentation, such as that listed at 310 CMR 40.0017(3), associated with the above-referenced samples. We will provide such additional documentation within 30 days of our receipt of such a request.

We appreciate your continued cooperation throughout the sampling process. If you have any questions regarding the sampling results, please do not hesitate to contact me at 781.721.4012 or igladstone@geiconsultants.com.

Sincerely,

GEI Consultants, Inc

A blue ink signature of Ileen S. Gladstone, consisting of a large, stylized 'G' followed by a horizontal line and a small flourish.

Ileen S. Gladstone, P.E, LSP
Senior Vice President

A black ink signature of Christopher O. Coner, featuring a stylized 'C' and 'C'.

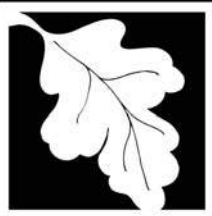
Christopher O. Coner, CHMM
Project Manager

NMT/MEF:jam

B:\Private\04516\2.0 Correspondence\2.4 Residences\Individual Residences\Knowlton Street\34 Knowlton\2025 Sampling Letters\February 2025 Results\34 Knowlton Feb Results Ltr.docx

Attachments

cc: Catherine Malagrida, UniFirst Corporation
MassDEP via Status Report



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

3 - 23246

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: 50 Tufts Street
City/Town: Somerville, MA Zip Code: 02145-4129

B. This notice is being provided to the following party:

1. Name: Max Jiang and Matthew Paul Viscue
2. Street Address: 34 Knowlton Street
City/Town: Somerville, MA Zip Code: 02145

C. This notice is being given to inform its recipient (the party listed in Section B):

- ☒ 1. That environmental sampling ~~will be~~/has been conducted at property owned by the recipient of this notice.
- ☒ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.
- ☒ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling ~~will be~~/has been conducted:

1. Street Address: 34 Knowlton Street
City/Town: Somerville, MA Zip Code: 02145
2. MCP phase of work during which the sampling ~~will be~~/has been conducted:
- | | |
|---|--|
| ☐ Immediate Response Action | ☐ Phase III Feasibility Evaluation |
| ☐ Release Abatement Measure | ☐ Phase IV Remedy Implementation Plan |
| ☐ Utility-related Abatement Measure | ☒ Phase V/Remedy Operation Status |
| ☐ Phase I Initial Site Investigation | ☐ Post-Temporary Solution Operation, Maintenance and Monitoring |
| ☐ Phase II Comprehensive Site Assessment | ☐ Other _____ |
- (specify)
3. Description of property where sampling ~~will be~~/has been conducted:
- ☒ residential ☐ commercial ☐ industrial ☐ school/playground ☐ Other _____
- (specify)
4. Description of the sampling locations and types (e.g., soil, groundwater, indoor air, soil gas) to the extent known at the time of this notice.

Indoor Air Sampling

E. Contact information related to the party providing this notice:

Contact Name: Ileen Gladstone, P.E., LSP, LEED AP
Street Address: GEI Consultants, Inc., 400 Unicorn Park Drive
City/Town: Woburn, MA Zip Code: 01801-3341
Telephone: (781) 721-4012 Email: igladstone@geiconsultants.com



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

3

- 23246

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation of a release for which a notification to MassDEP has been made under the Massachusetts Contingency Plan (310 CMR 40.0300) on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at <http://www.mass.gov/eea/agencies/massdep/cleanup>. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See <http://public.dep.state.ma.us/SearchableSites2/Search.aspx> to view site-specific files on-line or <http://mass.gov/eea/agencies/massdep/about/contacts/conduct-a-file-review.html> if you would like to make an appointment to see these files in person. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Table 1 -Chemical Testing Results - Post-EPMM Installation Indoor Air
34 Knowlton Street
Somerville, Massachusetts

Sample Location: Sample Name: Sample Date: Collected By: Units:			34 Knowlton Street								34 Knowlton Street							
			34KNOWLTON-BASE 6/21/14 GEI		34KNOWLTON-1 6/21/14 GEI		34-KNOWLTON-BASE 4/8/15 GEI		34-KNOWLTON-1 4/8/15 GEI		34-KNOWLTON-BASE 4/28/15 GEI		34-KNOWLTON-1 4/28/15 GEI		34-KNOWLTON-2 4/28/15 GEI		34-KNOWLTON-3 4/28/15 GEI	
			µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
Analyte	Method	MassDEP Residential Threshold Values																
Volatile Organic Compounds (VOCs)	TO-15																	
1,1,1-Trichloroethane (TCA)		3	<1.1	<0.20	<1.1	<0.20	<1.1	<0.20	1.2	0.22	<1.1	<0.20	<1.1	<0.20	<1.1	<0.20	<1.1	<0.20
cis-1,2-Dichloroethene		0.8	<0.79	<0.20	<0.79	<0.20	<0.79	<0.20	6.3	1.6	<0.79	<0.20	<0.79	<0.20	<0.79	<0.20	<0.79	<0.20
Tetrachloroethylene (PCE)		1.4	<1.4	<0.20	<1.4	<0.20	<1.4	<0.20	70.5	10.4	<1.4	<0.20	2.4	0.36	<1.4	<0.20	<1.4	<0.20
trans-1,2-Dichloroethene		0.8	11	2.8	18	4.6	<0.79	<0.20	<0.79	<0.20	<0.79	<0.20	1.5	0.39	4.8	1.2	16	4.0
Trichloroethene		0.4	<1.1	<0.20	<1.1	<0.20	<1.1	<0.20	1.2	0.22	<1.1	<0.20	<1.1	<0.20	<1.1	<0.20	<1.1	<0.20

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. MassDEP = Massachusetts Department of Environmental Protection
5. Residential Threshold Values for indoor air taken from the Massachusetts Department of Environmental Protection (MassDEP) "Vapor Intrusion Guidance: Site Assessment, Mitigation and Closure" dated October 2016.
6. Highlighted sample indicates most recent sampling round.
7. April 7, 2015 detections of PCE attributed to dry-cleaned clothing present in the residence.
8. The indoor air samples collected in February 2016 and November 2016 were collected under conditions that simulate the absence of the passive EPMM at the property.

Table 1 -Chemical Testing Results - Post-EPMM Installation Indoor Air
34 Knowlton Street
Somerville, Massachusetts

Sample Location: Sample Name: Sample Date: Collected By: Units:			34 Knowlton Street								34 Knowlton Street				34 Knowlton Street			
			34-KNOW-B 2/17/16 GEI		34-KNOW-1 2/17/16 GEI		34-KNOW-B 11/9/16 GEI		34-KNOW-1 11/9/16 GEI		34-KNOW-B 3/17/17 GEI		34-KNOW-1 3/17/17 GEI		34-KNOW-B 2/25/25 GEI		34-KNOW-1 4/9/25 GEI	
			µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
Analyte	Method	MassDEP Residential Threshold Values																
Volatile Organic Compounds (VOCs)	TO-15																	
1,1,1-Trichloroethane (TCA)		3	<1.1	<0.20	<1.1	<0.20	<1.1	<0.20	<1.1	<0.20	<1.1	<0.20	<1.1	<0.20	<0.109	<0.020	<0.109	<0.020
cis-1,2-Dichloroethene		0.8	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	< 0.79	< 0.20	<0.079	<0.020	<0.079	<0.020
Tetrachloroethylene (PCE)		1.4	0.54	0.08	2.6	0.38	1.8	0.26	5.5	0.81	1.9	0.28	3.7	0.54	<0.136	<0.020	0.163	0.024
trans-1,2-Dichloroethene		0.8	< 0.79	< 0.20	< 0.79	< 0.20	1.3	0.32	1.2	0.30	<0.79	<0.20	<0.79	<0.20	0.135	0.034	0.127	0.032
Trichloroethene		0.4	<0.21	<0.040	<0.21	<0.040	<0.21	<0.040	0.32	0.06	<0.21	<0.040	<0.21	<0.040	<0.107	<0.020	<0.107	<0.020

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. MassDEP = Massachusetts Department of Environmental Protection
5. Residential Threshold Values for indoor air taken from the Massachusetts Department of Environmental Protection (MassDEP) "Vapor Intrusion Guidance: Site Assessment, Mitigation and Closure" dated October 2016.
6. Highlighted sample indicates most recent sampling round.
7. April 7, 2015 detections of PCE attributed to dry-cleaned clothing present in the residence.
8. The indoor air samples collected in February 2016 and November 2016 were collected under conditions that simulate the absence of the passive EPMM at the property.

Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2511774**Report Date:** 03/26/25**SAMPLE RESULTS**

Lab ID: L2511774-02
 Client ID: 045163-34KNOWL-B1
 Sample Location: SOMERVILLE, MA

Date Collected: 02/25/25 15:20
 Date Received: 03/03/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/11/25 19:40
 Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	0.034	0.020	--	0.135	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	87		60-140
bromochloromethane	90		60-140
chlorobenzene-d5	92		60-140



Project Name: 50 TUFTS STREET**Project Number:** 045163**Lab Number:** L2519136**Report Date:** 04/09/25**SAMPLE RESULTS**

Lab ID: L2519136-01
 Client ID: 045163-34KNOWL-F1
 Sample Location: SOMERVILLE,MA

Date Collected: 03/27/25 15:30
 Date Received: 03/28/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 04/09/25 02:57
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	0.032	0.020	--	0.127	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.024	0.020	--	0.163	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	84		60-140
bromochloromethane	88		60-140
chlorobenzene-d5	85		60-140





Consulting
Engineers and
Scientists

May 5, 2025
Project 04516-3

Shelley Calder
Milton Yarberry
84 Franklin Street, Unit 3
Somerville, MA 02145

Dear Ms. Calder and Mr. Yarberry:

**Re: Indoor Air Sampling
84 Franklin Street
Somerville, Massachusetts**

Thank you for permitting GEI to conduct indoor air sampling at your property located at 84 Franklin Street in Somerville, Massachusetts. Prior to sampling, we are providing you with a "Notice of Environmental Sampling Form (BWSC-123)," as required by the Massachusetts Department of Environmental Protection (MassDEP). We will also provide you with the results of the indoor air sampling after they are available from the analytical laboratory.

Thank you for your continued assistance. Please contact me at 781-721-4012 or igladstone@geiconsultants.com, if you have any questions.

Sincerely,

GEI CONSULTANTS, INC.

A blue ink signature of Ileen S. Gladstone, consisting of a large, stylized 'G' followed by a horizontal line.

Ileen S. Gladstone, P.E., LSP, LEED AP
Senior Vice President

A blue ink signature of Christopher Coner, written in a cursive style.

Christopher Coner, CHMM
Project Manager

JWG/:jam
Enclosure

c: Catherine Malagrida, UniFirst Corporation
MassDEP-NERO (as part of Status Report)

B:\Private\04516\2.0 Correspondence\2.4 Residences\Individual Residences\Franklin Street\84 Franklin\Notice of Sampling Letters\1 May 2025 NOS\formatted.docx



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

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A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: _____
City/Town: _____ Zip Code: _____

B. This notice is being provided to the following party:

1. Name: _____
2. Street Address: _____
City/Town: _____ Zip Code: _____

C. This notice is being given to inform its recipient (the party listed in Section B):

1. That environmental sampling will be/~~has been~~ conducted at property owned by the recipient of this notice.
2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.
3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/~~has been~~ conducted:

1. Street Address: _____
City/Town: _____ Zip Code: _____
2. MCP phase of work during which the sampling will be/~~has been~~ conducted:
- | | |
|--|---|
| Immediate Response Action | Phase III Feasibility Evaluation |
| Release Abatement Measure | Phase IV Remedy Implementation Plan |
| Utility-related Abatement Measure | Phase V/Remedy Operation Status |
| Phase I Initial Site Investigation | Post-Temporary Solution Operation, Maintenance and Monitoring |
| Phase II Comprehensive Site Assessment | Other _____
(specify) |
3. Description of property where sampling will be/~~has been~~ conducted:
residential commercial industrial school/playground Other _____
(specify)
4. Description of the sampling locations and types (e.g., soil, groundwater, indoor air, soil gas) to the extent known at the time of this notice.

E. Contact information related to the party providing this notice:

Contact Name: _____
Street Address: _____
City/Town: _____ Zip Code: _____
Telephone: _____ Email: _____



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

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NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation of a release for which a notification to MassDEP has been made under the Massachusetts Contingency Plan (310 CMR 40.0300) on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at <http://www.mass.gov/eea/agencies/massdep/cleanup>. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See <http://public.dep.state.ma.us/SearchableSites2/Search.aspx> to view site-specific files on-line or <http://mass.gov/eea/agencies/massdep/about/contacts/conduct-a-file-review.html> if you would like to make an appointment to see these files in person. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

June 17, 2025
Project 045163

Shelley Calder
Milton Yarberry
84 Franklin Street, Unit 3
Somerville, MA 02145

**Re: Indoor Air Sampling Results
84 Franklin Street
Somerville, Massachusetts**

Dear Ms. Calder and Mr. Yarberry:

On behalf of the UniFirst Corporation, GEI Consultants, Inc. collected indoor air samples on May 7, 2025, at your property at 84 Franklin Street to evaluate the potential for vapor intrusion.

On May 7, 2025, one indoor air sample was collected in the basement, one sample was collected on the first floor, and one sample was collected from the second floor. The samples were collected over a 24-hour period. Attached is a summary table of the chemicals detected in the indoor air samples (Table 1), and the laboratory data sheets for the recent sampling.

Tetrachloroethylene (PCE) was detected in all three samples. Concentrations of PCE were detected at 0.176 micrograms per meter cubed ($\mu\text{g}/\text{m}^3$) in the basement, 0.400 $\mu\text{g}/\text{m}^3$ on the first floor, and 0.902 $\mu\text{g}/\text{m}^3$ on the second floor. Additionally, trans-1,2-dichloroethylene was detected in the samples collected in the basement and on the first floor at concentrations of 0.131 $\mu\text{g}/\text{m}^3$ and 0.079 $\mu\text{g}/\text{m}^3$, respectively. The detected indoor air concentrations are below the applicable MassDEP residential indoor air threshold values.

Individuals and public officials may request additional public involvement activities under the Massachusetts Contingency Plan (MCP; 310 CMR 40.1403(9) and 40.1404). The property owner may also request additional documentation, such as that listed at 310 CMR 40.0017(3), associated with the above-referenced samples. We will provide such additional documentation within 30 days of our receipt of such a request.

We appreciate your continued cooperation throughout the sampling process. If you have any questions regarding the sampling results, please do not hesitate to contact me at 781.721.4012 or igladstone@geiconsultants.com.

Sincerely,

GEI Consultants, Inc



Ileen S. Gladstone, P.E., LSP
Senior Vice President



Christopher O. Coner, CHMM
Project Manager

MEF:jam

B:\Private\04516\2.0 Correspondence\2.4 Residences\Individual Residences\Franklin Street\84 Franklin\Notice of Sampling Letters\2 May 2025 Results\84 Franklin Street IA Results June 2025.docx

Attachments

cc: Catherine Malagrida, UniFirst Corporation
MassDEP via Status Report



**Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup**

BWSC123

This Notice is Related to:
Release Tracking Number

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

3 - 23246

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: 50 Tufts Street
City/Town: Somerville, MA Zip Code: 02145-4225

B. This notice is being provided to the following party:

1. Name: Ms. Shelley Calder and Mr. Milton Yarberry
2. Street Address: 84 Franklin Street
City/Town: Somerville, MA Zip Code: 02145

C. This notice is being given to inform its recipient (the party listed in Section B):

- ☒ 1. That environmental sampling ~~will be~~/has been conducted at property owned by the recipient of this notice.
- ☒ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.
- ☒ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling ~~will be~~/has been conducted:

1. Street Address: 84 Franklin Street
City/Town: Somerville, MA Zip Code: 02145-4216
2. MCP phase of work during which the sampling ~~will be~~/has been conducted:
- | | |
|---|--|
| ☐ Immediate Response Action | ☐ Phase III Feasibility Evaluation |
| ☐ Release Abatement Measure | ☐ Phase IV Remedy Implementation Plan |
| ☐ Utility-related Abatement Measure | ☒ Phase V/Remedy Operation Status |
| ☐ Phase I Initial Site Investigation | ☐ Post-Temporary Solution Operation, Maintenance and Monitoring |
| ☐ Phase II Comprehensive Site Assessment | ☐ Other _____ |
- (specify)
3. Description of property where sampling ~~will be~~/has been conducted:
- ☒ residential ☐ commercial ☐ industrial ☐ school/playground ☐ Other _____
- (specify)
4. Description of the sampling locations and types (e.g., soil, groundwater, indoor air, soil gas) to the extent known at the time of this notice.

Indoor air sampling

E. Contact information related to the party providing this notice:

Contact Name: Ileen Gladstone, P.E., LSP, LEED AP
Street Address: GEI Consultants, Inc., 400 Unicorn Park Drive
City/Town: Woburn, MA Zip Code: 01801-3341
Telephone: (781) 721-4012 Email: igladstone@geiconsultants.com



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

3

- 23246

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation of a release for which a notification to MassDEP has been made under the Massachusetts Contingency Plan (310 CMR 40.0300) on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at <http://www.mass.gov/eea/agencies/massdep/cleanup>. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See <http://public.dep.state.ma.us/SearchableSites2/Search.aspx> to view site-specific files on-line or <http://mass.gov/eea/agencies/massdep/about/contacts/conduct-a-file-review.html> if you would like to make an appointment to see these files in person. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Table 1 - Chemical Testing Results - Indoor Air

84 Franklin Street

Somerville, Massachusetts

			Sample Location: 84 Franklin Street					
			Sample Name: 84-FRANK-B		84-FRANK-F1		84-FRANK-F2	
			Sample Date: 5/7/25		5/7/25		5/7/25	
			Units: µg/m ³ ppbv		µg/m ³ ppbv		µg/m ³ ppbv	
Analyte	Method	MassDEP Residential Threshold Values						
Volatile Organic Compounds (VOCs)	TO-15							
Tetrachloroethylene (PCE)		1.4	0.176	0.059	0.400	0.059	0.902	0.133
trans-1,2-Dichloroethene		0.8	0.131	0.020	0.079	0.020	<0.079	<0.020

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. NT= Not tested
5. NS= No standard established
6. MassDEP = Massachusetts Department of Environmental Protection
7. Residential Threshold Values for indoor air taken from the Massachusetts Department of Environmental Protection (MassDEP) "Vapor Intrusion Guidance: Site Assessment, Mitigation and Closure" dated October 2016.

Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2528274**Report Date:** 05/27/25**SAMPLE RESULTS**

Lab ID: L2528274-01
 Client ID: 045163-84FRANK-B
 Sample Location: SOMERVILLE, MA

Date Collected: 05/07/25 09:41
 Date Received: 05/07/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 05/12/25 23:06
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	0.033	0.020	--	0.131	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.026	0.020	--	0.176	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	91		60-140
bromochloromethane	88		60-140
chlorobenzene-d5	97		60-140



Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2528274**Report Date:** 05/27/25**SAMPLE RESULTS**

Lab ID: L2528274-02
 Client ID: 045163-84FRANK-F1
 Sample Location: SOMERVILLE, MA

Date Collected: 05/07/25 09:40
 Date Received: 05/07/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 05/12/25 23:47
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	0.020	0.020	--	0.079	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.059	0.020	--	0.400	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	81		60-140
bromochloromethane	86		60-140
chlorobenzene-d5	87		60-140



Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2528274**Report Date:** 05/27/25**SAMPLE RESULTS**

Lab ID: L2528274-03
 Client ID: 045163-84FRANK-F2
 Sample Location: SOMERVILLE, MA

Date Collected: 05/07/25 09:37
 Date Received: 05/07/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 05/13/25 00:29
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.133	0.020	--	0.902	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	79		60-140
bromochloromethane	85		60-140
chlorobenzene-d5	82		60-140





Consulting
Engineers and
Scientists

February 26, 2025
Project 04516-3

Philip Carey
120 Rogers Avenue
Somerville, MA 02144-2209

Dear Mr. Carey:

**Re: Indoor Air Sampling
91-93 Franklin Street
Somerville, Massachusetts**

Thank you for permitting GEI to conduct indoor air sampling at your property located at 91-93 Franklin Street in Somerville, Massachusetts. Following sampling, we are providing you with a "Notice of Environmental Sampling Form (BWSC-123)," as required by the Massachusetts Department of Environmental Protection (MassDEP). We will also provide you with the results of the indoor air sampling after they are available from the analytical laboratory.

Thank you for your continued assistance. Please contact me at 781-721-4012 or igladstone@geiconsultants.com, if you have any questions.

Sincerely,

GEI CONSULTANTS, INC.

A blue ink signature of Ileen S. Gladstone, consisting of a large, stylized 'G' followed by a horizontal line and a small flourish.

Ileen S. Gladstone, P.E., LSP, LEED AP
Senior Vice President

A blue ink signature of Christopher Coner, featuring a stylized 'C' followed by a horizontal line and a small flourish.

Christopher Coner, CHMM
Project Manager

JWG:/jam

Enclosure

c: Catherine Malagrida, UniFirst Corporation
MassDEP-NERO (as part of Status Report)

B:\Private\04516\2.0 Correspondence\2.4 Residences\Individual Residences\Franklin Street\91-93 Franklin\2025 Sampling Letters\91-93 Franklin NOS Ltr Feb 2025.docx



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

3 - 23246

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: 50 Tufts Street
City/Town: Somerville, MA Zip Code: 02145-4129

B. This notice is being provided to the following party:

1. Name: Philip Carey
2. Street Address: 120 Rogers Avenue
City/Town: Somerville, MA Zip Code: 02144-2209

C. This notice is being given to inform its recipient (the party listed in Section B):

- ☒ 1. That environmental sampling ~~will be~~/has been conducted at property owned by the recipient of this notice.
- ☐ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.
- ☐ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling ~~will be~~/has been conducted:

1. Street Address: 91-93 Franklin Street
City/Town: Somerville, MA Zip Code: 02145-4230
2. MCP phase of work during which the sampling ~~will be~~/has been conducted:
- | | |
|---|--|
| ☐ Immediate Response Action | ☐ Phase III Feasibility Evaluation |
| ☐ Release Abatement Measure | ☐ Phase IV Remedy Implementation Plan |
| ☐ Utility-related Abatement Measure | ☒ Phase V/Remedy Operation Status |
| ☐ Phase I Initial Site Investigation | ☐ Post-Temporary Solution Operation, Maintenance and Monitoring |
| ☐ Phase II Comprehensive Site Assessment | ☐ Other _____ |
- (specify)
3. Description of property where sampling ~~will be~~/has been conducted:
- ☒ residential ☐ commercial ☐ industrial ☐ school/playground ☐ Other _____
- (specify)
4. Description of the sampling locations and types (e.g., soil, groundwater, indoor air, soil gas) to the extent known at the time of this notice.

Indoor air sampling

E. Contact information related to the party providing this notice:

Contact Name: Ileen Gladstone, P.E., LSP, LEED AP
Street Address: GEI Consultants, Inc., 400 Unicorn Park Drive
City/Town: Woburn, MA Zip Code: 01801-3341
Telephone: (781) 721-4012 Email: igladstone@geiconsultants.com



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

NOTICE OF ENVIRONMENTAL SAMPLING

3 - 23246

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation of a release for which a notification to MassDEP has been made under the Massachusetts Contingency Plan (310 CMR 40.0300) on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at <http://www.mass.gov/eea/agencies/massdep/cleanup>. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See <http://public.dep.state.ma.us/SearchableSites2/Search.aspx> to view site-specific files on-line or <http://mass.gov/eea/agencies/massdep/about/contacts/conduct-a-file-review.html> if you would like to make an appointment to see these files in person. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

April 3, 2025
Project 045163

Mr. Philip Carey
91-93 Franklin Street
Somerville, MA 02143

**Re: Indoor Air Sampling Results
91-93 Franklin Street
Somerville, Massachusetts**

Dear Mr. Carey:

On behalf of the UniFirst Corporation, GEI Consultants, Inc. collected indoor air samples on February 28, 2025, at your property at 91-93 Franklin Street to evaluate the potential for vapor intrusion.

On February 28, 2025, one indoor air sample was collected in the basement and two samples were collected on the first floor, one in each of the units. The samples were collected over a 24-hour period. Attached is a summary table of the chemicals detected in the indoor air samples (Table 1), and the laboratory data sheets for the recent sampling.

Tetrachloroethylene (PCE) was detected in all three samples. Concentrations of PCE were detected at 0.183 micrograms per meter cubed ($\mu\text{g}/\text{m}^3$) on the first floor of 93 Franklin, 0.163 $\mu\text{g}/\text{m}^3$ on the first floor of 91 Franklin and 0.156 $\mu\text{g}/\text{m}^3$ in the basement.

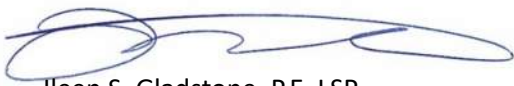
The detected indoor air concentrations are below the applicable MassDEP residential and commercial indoor air threshold values.

Individuals and public officials may request additional public involvement activities under the Massachusetts Contingency Plan (MCP; 310 CMR 40.1403(9) and 40.1404). The property owner may also request additional documentation, such as that listed at 310 CMR 40.0017(3), associated with the above-referenced samples. We will provide such additional documentation within 30 days of our receipt of such a request.

We appreciate your continued cooperation throughout the sampling process. If you have any questions regarding the sampling results, please do not hesitate to contact me at 781.721.4012 or igladstone@geiconsultants.com.

Sincerely,

GEI Consultants, Inc



Ileen S. Gladstone, P.E, LSP
Senior Vice President



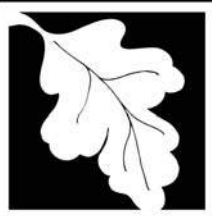
Christopher O. Coner, CHMM
Project Manager

NMT/MEF:jam

B:\Private\04516\2.0 Correspondence\2.4 Residences\Individual Residences\Franklin Street\91-93 Franklin\2025 Sampling Letters\February Results\91-93 Franklin Feb Results Ltr.docx

Attachments

cc: Catherine Malagrida, UniFirst Corporation
MassDEP via Status Report



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

3 - 23246

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: 50 Tufts Street
City/Town: Somerville, MA Zip Code: 02145-4129

B. This notice is being provided to the following party:

1. Name: Philip Carey
2. Street Address: 120 Rogers Avenue
City/Town: Somerville, MA Zip Code: 02144-2209

C. This notice is being given to inform its recipient (the party listed in Section B):

- ☒ 1. That environmental sampling ~~will be~~/has been conducted at property owned by the recipient of this notice.
- ☒ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.
- ☒ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling ~~will be~~/has been conducted:

1. Street Address: 91-93 Franklin Street
City/Town: Somerville, MA Zip Code: 02145-4230
2. MCP phase of work during which the sampling ~~will be~~/has been conducted:
- | | |
|---|--|
| ☐ Immediate Response Action | ☐ Phase III Feasibility Evaluation |
| ☐ Release Abatement Measure | ☐ Phase IV Remedy Implementation Plan |
| ☐ Utility-related Abatement Measure | ☒ Phase V/Remedy Operation Status |
| ☐ Phase I Initial Site Investigation | ☐ Post-Temporary Solution Operation, Maintenance and Monitoring |
| ☐ Phase II Comprehensive Site Assessment | ☐ Other _____ |
- (specify)
3. Description of property where sampling ~~will be~~/has been conducted:
- ☒ residential ☐ commercial ☐ industrial ☐ school/playground ☐ Other _____
- (specify)
4. Description of the sampling locations and types (e.g., soil, groundwater, indoor air, soil gas) to the extent known at the time of this notice.
- Indoor air sampling

E. Contact information related to the party providing this notice:

Contact Name: Ileen Gladstone, P.E., LSP, LEED AP
Street Address: GEI Consultants, Inc., 400 Unicorn Park Drive
City/Town: Woburn, MA Zip Code: 01801-3341
Telephone: (781) 721-4012 Email: igladstone@geiconsultants.com



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

3

- 23246

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation of a release for which a notification to MassDEP has been made under the Massachusetts Contingency Plan (310 CMR 40.0300) on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at <http://www.mass.gov/eea/agencies/massdep/cleanup>. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See <http://public.dep.state.ma.us/SearchableSites2/Search.aspx> to view site-specific files on-line or <http://mass.gov/eea/agencies/massdep/about/contacts/conduct-a-file-review.html> if you would like to make an appointment to see these files in person. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Table 1 - Chemical Testing Results - Pre- and Post-EPMM Indoor Air
91-93 Franklin Street
Somerville, Massachusetts

Sample Location:		91-93 Franklin Street pre-EPMM				91-93 Franklin Street post-EPMM															
Sample Name:		93 Franklin-1		93 Franklin-B		91-93 FRANK-1		91-93 FRANK-B		91-93FRAN-1		91-93FRAN-B		91-93FRAN-1		91-93FRAN-B		91-93FRAN-1		91-93FRAN-B	
Sample Date:		2/14/07		2/14/07		4/8/09		4/8/09		3/24/10		3/24/10		12/7/10		12/7/2010		2/2/11		2/2/2011	
Units:		µg/m ³ ppbv		µg/m ³ ppbv		µg/m ³ ppbv		µg/m ³ ppbv		µg/m ³ ppbv		µg/m ³ ppbv		µg/m ³ ppbv		µg/m ³ ppbv		µg/m ³ ppbv		µg/m ³ ppbv	
Analyte	Method																				
Volatile Organic Compounds (VOCs)		TO-15																			
Tetrachloroethylene (PCE)		0.95 J	0.14 J	3.5	0.52	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. EPMM = Exposure Pathway Mitigation Measure.
5. NT= Not tested
6. Highlighted sample indicates most recent sampling round.

Qualifying Note:

- J The reported result is below the laboratory reporting limit and is estimated.

Table 1 - Chemical Testing Results - Pre- and Post-EPMM Indoor Air
91-93 Franklin Street
Somerville, Massachusetts

Sample Location: Sample Name: Sample Date: Units:		91-93 Franklin Street post-EPMM (cont)									
		91-93FRAN-1 3/2/12		91-93FRAN-B 3/2/2012		93FRAN-1 2/28/25		91FRAN-1 2/28/25		93FRAN-B 2/28/25	
		µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
Analyte	Method										
Volatile Organic Compounds (VOCs)	TO-15										
Tetrachloroethylene (PCE)		<1.4	<0.20	<1.4	<0.20	0.183	0.027	0.163	0.024	0.156	0.023

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. EPMM = Exposure Pathway Mitigation Measure.
5. NT= Not tested
6. Highlighted sample indicates most recent sampling round.

Qualifying Note:

- J The reported result is below the laboratory reporting limit and is estimated.

Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2511794**Report Date:** 03/13/25**SAMPLE RESULTS**

Lab ID: L2511794-01
 Client ID: 045163-93FRANKLIN-1
 Sample Location: SOMERVILLE, MA

Date Collected: 02/28/25 10:05
 Date Received: 03/03/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/11/25 21:38
 Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.027	0.020	--	0.183	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	80		60-140
bromochloromethane	83		60-140
chlorobenzene-d5	86		60-140



Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2511794**Report Date:** 03/13/25**SAMPLE RESULTS**

Lab ID: L2511794-02
 Client ID: 045163-91FRANKLIN-1
 Sample Location: SOMERVILLE, MA

Date Collected: 02/28/25 10:00
 Date Received: 03/03/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/11/25 22:19
 Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.024	0.020	--	0.163	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	78		60-140
bromochloromethane	81		60-140
chlorobenzene-d5	84		60-140



Project Name: TUFTS ST**Lab Number:** L2511794**Project Number:** 045163**Report Date:** 03/13/25**SAMPLE RESULTS**

Lab ID: L2511794-03
 Client ID: 045163-93FRANKLIN-B
 Sample Location: SOMERVILLE, MA

Date Collected: 02/28/25 10:02
 Date Received: 03/03/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/11/25 22:58
 Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.023	0.020	--	0.156	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	81		60-140
bromochloromethane	84		60-140
chlorobenzene-d5	88		60-140





Consulting
Engineers and
Scientists

February 19, 2025
Project 04516-3

Catalina Barhona
97 Franklin Street
Somerville, MA 02145

Dear Ms. Barhona:

**Re: Indoor Air and Soil Vapor Sampling
97 Franklin Street
Somerville, Massachusetts**

Thank you for permitting GEI to conduct soil vapor and indoor air sampling at your property located at 97 Franklin Street in Somerville, Massachusetts. Following sampling, we are providing you with a "Notice of Environmental Sampling Form (BWSC-123)," as required by the Massachusetts Department of Environmental Protection (MassDEP). We will also provide you with the results of the soil vapor and indoor air sampling after they are available from the analytical laboratory.

Thank you for your continued assistance. Please contact me at 781-721-4012 or igladstone@geiconsultants.com, if you have any questions.

Sincerely,

GEI CONSULTANTS, INC.

A blue ink signature of Ileen S. Gladstone, consisting of a large, stylized 'I' followed by a horizontal line and a small loop.

Ileen S. Gladstone, P.E., LSP, LEED AP
Senior Vice President

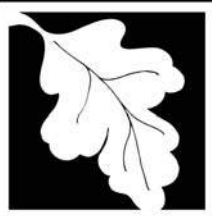
A blue ink signature of Christopher Coner, featuring a stylized 'C' followed by a horizontal line and a small loop.

Christopher Coner, CHMM
Project Manager

JWG/:jam
Enclosure

c: Catherine Malagrida, UniFirst Corporation
MassDEP-NERO (as part of Status Report)

B:\Private\04516\2.0 Correspondence\2.4 Residences\Individual Residences\Franklin Street\97 Franklin\Sample Notification Letters\Feb 2025 NOS\97 Franklin NOS Ltr Feb 2025.docx



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

3 - 23246

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: 50 Tufts Street
City/Town: Somerville, MA Zip Code: 02145-4129

B. This notice is being provided to the following party:

1. Name: Catalina Barhona
2. Street Address: 97 Franklin Street
City/Town: Somerville, MA Zip Code: 02145-4231

C. This notice is being given to inform its recipient (the party listed in Section B):

- ☒ 1. That environmental sampling ~~will be~~/has been conducted at property owned by the recipient of this notice.
- ☐ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.
- ☐ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling ~~will be~~/has been conducted:

1. Street Address: 97 Franklin Street
City/Town: Somerville, MA Zip Code: 02145-4231
2. MCP phase of work during which the sampling ~~will be~~/has been conducted:
- | | |
|---|--|
| ☐ Immediate Response Action | ☐ Phase III Feasibility Evaluation |
| ☐ Release Abatement Measure | ☐ Phase IV Remedy Implementation Plan |
| ☐ Utility-related Abatement Measure | ☒ Phase V/Remedy Operation Status |
| ☐ Phase I Initial Site Investigation | ☐ Post-Temporary Solution Operation, Maintenance and Monitoring |
| ☐ Phase II Comprehensive Site Assessment | ☐ Other _____ |
- (specify)
3. Description of property where sampling ~~will be~~/has been conducted:
- ☒ residential ☐ commercial ☐ industrial ☐ school/playground ☐ Other _____
- (specify)
4. Description of the sampling locations and types (e.g., soil, groundwater, indoor air, soil gas) to the extent known at the time of this notice.
- Indoor air and sub-slab soil vapor sampling

E. Contact information related to the party providing this notice:

Contact Name: Ileen Gladstone, P.E., LSP, LEED AP
Street Address: GEI Consultants, Inc., 400 Unicorn Park Drive
City/Town: Woburn, MA Zip Code: 01801-3341
Telephone: (781) 721-4012 Email: igladstone@geiconsultants.com



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

3

- 23246

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation of a release for which a notification to MassDEP has been made under the Massachusetts Contingency Plan (310 CMR 40.0300) on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at <http://www.mass.gov/eea/agencies/massdep/cleanup>. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See <http://public.dep.state.ma.us/SearchableSites2/Search.aspx> to view site-specific files on-line or <http://mass.gov/eea/agencies/massdep/about/contacts/conduct-a-file-review.html> if you would like to make an appointment to see these files in person. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

April 4, 2025
Project 045163

Catalina Barahona
97 Franklin Street
Somerville, MA 02145

**Re: Indoor Air and Sub-Soil Vapor Sampling Results
97 Franklin Street
Somerville, Massachusetts**

Dear Ms. Barahona:

On behalf of the UniFirst Corporation, GEI Consultants, Inc. collected indoor air and sub-slab soil vapor samples on February 19, 2025, at your property at 97 Franklin Street to evaluate the potential for vapor intrusion.

On February 19, 2025, one indoor air sample was collected on the first floor, one indoor air sample was collected on the second floor, and one indoor air sample was collected in the basement. The samples were collected over a 24-hour period. Attached is a summary table of the chemicals detected in the indoor air samples (Table 1), and the laboratory data sheets for the recent sampling.

Tetrachloroethylene (PCE) was detected in the basement sample at a concentration of 0.624 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$), in the first-floor sample at a concentration of $0.190 \mu\text{g}/\text{m}^3$, and in the second-floor sample at a concentration of $0.176 \mu\text{g}/\text{m}^3$. Additionally, trichloroethylene (TCE) was detected in the basement at a concentration of $1.10 \mu\text{g}/\text{m}^3$, in the first-floor sample at a concentration of $0.199 \mu\text{g}/\text{m}^3$, and in the second-floor sample at a concentration $0.220 \mu\text{g}/\text{m}^3$. 1,1,1-trichloroethane (TCA) was detected in the basement sample at concentration of $0.240 \mu\text{g}/\text{m}^3$ and 1,1-dichloroethane was detected in the basement sample at concentration of $0.085 \mu\text{g}/\text{m}^3$.

On February 19, 2025, GEI collected two soil vapor samples from the previously installed sub-slab monitoring points to evaluate the concentrations of chlorinated VOCs in soil vapor beneath the building. Attached is a summary table of the chemicals detected in the soil vapor samples (Table 2) and the laboratory data sheets for the recent sampling.

Concentrations of PCE were detected above laboratory reporting limits. PCE was detected in both samples at $21.0 \mu\text{g}/\text{m}^3$ and $1.04 \mu\text{g}/\text{m}^3$ in SS1 and SS2, respectively. Additionally, concentrations of TCE were detected above laboratory reporting limits. TCE was detected in both samples at $0.113 \mu\text{g}/\text{m}^3$ and $0.269 \mu\text{g}/\text{m}^3$ in SS1 and SS2, respectively.

The concentrations of TCE detected on the first and second floors are below the Massachusetts Department of Environmental Protection (MassDEP) threshold values (TV), which indicate that the vapor intrusion pathway is unlikely to be of concern. Although the concentrations of TCE exceeded the TVs in the basement, a risk characterization, performed by GEI using the February 19, 2025, indoor air results in accordance with MassDEP protocols demonstrates that the indoor air concentrations pose No Significant Risk (NSR) to a residential occupant.

Individuals and public officials may request additional public involvement activities under the Massachusetts Contingency Plan (MCP; 310 CMR 40.1403(9) and 40.1404). The property owner may also request additional documentation, such as that listed at 310 CMR 40.0017(3), associated with the above-referenced samples. We will provide such additional documentation within 30 days of our receipt of such a request.

We appreciate your continued cooperation throughout the sampling process. If you have any questions regarding the sampling results, please do not hesitate to contact me at 781.721.4012 or igladstone@geiconsultants.com.

Sincerely,

GEI Consultants, Inc



Ileen S. Gladstone, P.E, LSP
Senior Vice President



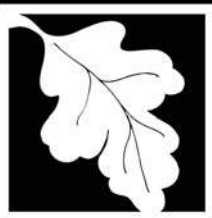
Christopher O. Coner, CHMM
Project Manager

JWG/MEF:jam

B:\Private\04516\2.0 Correspondence\2.4 Residences\Individual Residences\Franklin Street\97 Franklin\Sample Notification Letters\4 Feb 2025 Results\97 Franklin Feb Results Ltr.docx

Attachments

cc: Catherine Malagrida, UniFirst Corporation
MassDEP via Status Report



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

3 - 23246

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: 50 Tufts Street
City/Town: Somerville, MA Zip Code: 02145-4129

B. This notice is being provided to the following party:

1. Name: Catalina Barhona
2. Street Address: 97 Franklin Street
City/Town: Somerville, MA Zip Code: 02145-4231

C. This notice is being given to inform its recipient (the party listed in Section B):

- ☒ 1. That environmental sampling ~~will be~~/has been conducted at property owned by the recipient of this notice.
- ☒ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.
- ☒ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling ~~will be~~/has been conducted:

1. Street Address: 97 Franklin Street
City/Town: Somerville, MA Zip Code: 02145-4231
2. MCP phase of work during which the sampling ~~will be~~/has been conducted:
- | | |
|---|--|
| ☐ Immediate Response Action | ☐ Phase III Feasibility Evaluation |
| ☐ Release Abatement Measure | ☐ Phase IV Remedy Implementation Plan |
| ☐ Utility-related Abatement Measure | ☒ Phase V/Remedy Operation Status |
| ☐ Phase I Initial Site Investigation | ☐ Post-Temporary Solution Operation, Maintenance and Monitoring |
| ☐ Phase II Comprehensive Site Assessment | ☐ Other _____ |
- (specify)
3. Description of property where sampling ~~will be~~/has been conducted:
- ☒ residential ☐ commercial ☐ industrial ☐ school/playground ☐ Other _____
- (specify)
4. Description of the sampling locations and types (e.g., soil, groundwater, indoor air, soil gas) to the extent known at the time of this notice.
- Indoor air and sub-slab soil vapor sampling

E. Contact information related to the party providing this notice:

Contact Name: Ileen Gladstone, P.E., LSP, LEED AP
Street Address: GEI Consultants, Inc., 400 Unicorn Park Drive
City/Town: Woburn, MA Zip Code: 01801-3341
Telephone: (781) 721-4012 Email: igladstone@geiconsultants.com



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

3

- 23246

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation of a release for which a notification to MassDEP has been made under the Massachusetts Contingency Plan (310 CMR 40.0300) on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at <http://www.mass.gov/eea/agencies/massdep/cleanup>. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See <http://public.dep.state.ma.us/SearchableSites2/Search.aspx> to view site-specific files on-line or <http://mass.gov/eea/agencies/massdep/about/contacts/conduct-a-file-review.html> if you would like to make an appointment to see these files in person. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Table 1 -Chemical Testing Results Indoor Air
97 Franklin Street
Somerville, Massachusetts

Sample Location: Sample Name: Sample Date: Units:		97 Franklin Street															
		97FRAN-1 9/29/07		97FRAN-B 9/29/07		97FRAN-1 2/21/08		97FRAN-B 2/21/08		97FRAN-1 7/24/08		97FRAN-B 7/24/08		97FRAN-1 1/14/09		97FRAN-B 1/14/09	
		µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
Analyte	Method																
Volatile Organic Compounds (VOCs)	TO-15																
Carbon Tetrachloride		< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	0.69 J	0.11 J	0.69 J	0.11 J	0.63 J	0.10 J	0.75 J	0.12 J
Dichloroethane, 1,1-		<0.81	<0.20	<0.81	<0.20	<0.81	<0.20	<0.81	<0.20	<0.81	<0.20	<0.81	<0.20	<0.81	<0.20	<0.81	<0.20
1,2-Dichloroethane		< 0.81	< 0.20	< 0.81	< 0.20	0.69 J	0.17 J	< 0.81	< 0.20	11	2.6	0.81	0.20	< 0.81	< 0.20	< 0.81	< 0.20
Tetrachloroethylene (PCE)		< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	1.0 J	0.15 J	< 1.4	< 0.20	1.3 J	0.19 J	< 1.4	< 0.20	0.81 J	0.12 J
1,1,1-Trichloroethane		<1.1	< 0.20	<1.1	< 0.20	<1.1	< 0.20	<1.1	< 0.20	<1.1	< 0.20	<1.1	< 0.20	<1.1	< 0.20	<1.1	< 0.20
Trichloroethylene (TCE)		< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	1.0 J	0.15 J	< 1.4	< 0.20	1.3 J	0.19 J	< 1.4	< 0.20	0.81 J	0.12 J

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. "<" = The analyte was not detected at a concentration above the specified laboratory reporting limit.
5. NT= Not tested

Qualifying Note:

- J The reported result is below the laboratory reporting limit and is estimated.

Table 1 -Chemical Testing Results Indoor Air
97 Franklin Street
Somerville, Massachusetts

Sample Location: Sample Name: Sample Date: Units:		97 Franklin Street (cont.)															
		97FRAN-1 3/8/10		97FRAN-B 3/8/10		97FRAN-1 5/24/24		97FRAN-B 5/24/24		97FRAN-2 5/24/24		97FRAN-1 2/19/25		97FRAN-B 2/19/25		97FRAN-2 2/19/25	
		µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
Analyte	Method																
Volatile Organic Compounds (VOCs)	TO-15																
Carbon Tetrachloride		< 1.3	< 0.20	< 1.3	< 0.20	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Dichloroethane, 1,1-		<0.81	<0.20	<0.81	<0.20	<0.081	<0.020	<0.081	<0.020	<0.081	<0.020	<0.081	<0.020	0.085	0.021	<0.081	<0.020
1,2-Dichloroethane		< 0.81	< 0.20	< 0.81	< 0.20	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Tetrachloroethylene (PCE)		1.0 J	0.15 J	1.6	0.23	0.522	0.077	1.72	0.254	<0.136	<0.020	0.190	0.028	0.624	0.092	0.176	0.026
1,1,1-Trichloroethane		<1.1	< 0.20	<1.1	< 0.20	<0.109	<0.020	0.125	0.023	<0.109	<0.020	<0.109	<0.020	0.240	0.044	<0.109	<0.020
Trichloroethylene (TCE)		1.0 J	0.15 J	1.6	0.23	0.167	0.031	0.489	0.091	0.150	<0.028	0.199	0.037	1.10	0.204	0.220	0.041

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. "<" = The analyte was not detected at a concentration above the specified laboratory reporting limit.
5. NT= Not tested

Qualifying Note:

- J The reported result is below the laboratory reporting limit and is estimated.

Table 2 - Chemical Testing Results Sub-Slab Soil Vapor
97 Franklin Street
Somerville, Massachusetts

Sample Location: Sample Name: Sample Date: Units:		97 Franklin Street											
		97FRANK-SS1 6/30/2007		97FRANK-SS2 6/30/2007		97FRANK-SS1 5/24/2024		97FRANK-SS2 5/24/2024		97FRANK-SS1 2/19/2025		97FRANK-SS2 2/19/2025	
		µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
Analyte	Method												
Volatile Organic Compounds (VOCs)	TO-15												
Carbon tetrachloride		0.82 J	0.13 J	< 0.53	< 0.20	NT	NT	NT	NT	NT	NT	NT	NT
Tetrachloroethylene (PCE)		34	5.0	86.8	12.8	1.31	0.193	6.16	0.909	21.0	3.10	1.04	0.153
1,1,1-Trichloroethane (TCA)		< 1.1	< 0.20	1.5	0.27	<0.109	<0.020	0.136	0.025	<0.109	<0.020	<0.109	<0.020
Trichloroethylene (TCE)		<1.1	<0.20	<1.1	<0.20	<0.107	<0.020	0.150	0.028	0.113	0.021	0.269	0.050

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. "<" = The analyte was not detected at a concentration above the specified laboratory reporting limit.
5. NT= Not tested

Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2509914**Report Date:** 03/10/25**SAMPLE RESULTS**

Lab ID: L2509914-01
 Client ID: 045163-97FRANK-B
 Sample Location: SOMERVILLE

Date Collected: 02/19/25 08:18
 Date Received: 02/21/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/04/25 05:06
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	0.021	0.020	--	0.085	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	0.044	0.020	--	0.240	0.109	--		1
Trichloroethene	0.204	0.020	--	1.10	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.092	0.020	--	0.624	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	83		60-140
bromochloromethane	92		60-140
chlorobenzene-d5	88		60-140



Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2509914**Report Date:** 03/10/25**SAMPLE RESULTS**

Lab ID: L2509914-02
 Client ID: 045163-97FRANK-1
 Sample Location: SOMERVILLE

Date Collected: 02/19/25 08:37
 Date Received: 02/21/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/04/25 05:45
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	0.037	0.020	--	0.199	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.028	0.020	--	0.190	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	81		60-140
bromochloromethane	91		60-140
chlorobenzene-d5	83		60-140



Project Name: TUFTS ST**Lab Number:** L2509914**Project Number:** 045163**Report Date:** 03/10/25**SAMPLE RESULTS**

Lab ID: L2509914-03
 Client ID: 045163-97FRANK-2
 Sample Location: SOMERVILLE

Date Collected: 02/19/25 08:35
 Date Received: 02/21/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/04/25 06:24
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	0.041	0.020	--	0.220	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.026	0.020	--	0.176	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	83		60-140
bromochloromethane	92		60-140
chlorobenzene-d5	83		60-140



Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2509914**Report Date:** 03/10/25**SAMPLE RESULTS**

Lab ID: L2509914-04
 Client ID: 045163-97FRANK-SS1
 Sample Location: SOMERVILLE

Date Collected: 02/19/25 09:38
 Date Received: 02/21/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil_Vapor
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/09/25 02:57
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	0.021	0.020	--	0.113	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	3.10	0.020	--	21.0	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	88		60-140
bromochloromethane	94		60-140
chlorobenzene-d5	95		60-140



Project Name: TUFTS ST**Lab Number:** L2509914**Project Number:** 045163**Report Date:** 03/10/25**SAMPLE RESULTS**

Lab ID: L2509914-05
 Client ID: 045163-97FRANK-SS2
 Sample Location: SOMERVILLE

Date Collected: 02/19/25 09:36
 Date Received: 02/21/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil_Vapor
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/09/25 04:13
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	0.050	0.020	--	0.269	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.153	0.020	--	1.04	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	86		60-140
bromochloromethane	92		60-140
chlorobenzene-d5	94		60-140





Consulting
Engineers and
Scientists

February 19, 2025
Project 04516-3

Ms. Vera Barter
Hodan Property Management
105 Washington Street
Somerville, MA 02143

Dear Ms. Vera Barter:

**Re: Indoor Air and Soil Vapor Sampling
103 Washington Street
Somerville, Massachusetts**

Thank you for permitting GEI to conduct soil vapor and indoor air sampling at your property located at 103 Washington Street in Somerville, Massachusetts. Following sampling, we are providing you with a "Notice of Environmental Sampling Form (BWSC-123)," as required by the Massachusetts Department of Environmental Protection (MassDEP). We will also provide you with the results of the soil vapor and indoor air sampling after they are available from the analytical laboratory.

Thank you for your continued assistance. Please contact me at 781-721-4012 or igladstone@geiconsultants.com, if you have any questions.

Sincerely,

GEI CONSULTANTS, INC.

A blue ink signature of Helen S. Gladstone, consisting of a large, stylized 'H' followed by a series of loops and a long horizontal stroke.

Helen S. Gladstone, P.E., LSP, LEED AP
Senior Vice President

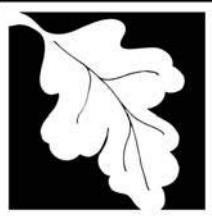
A blue ink signature of Christopher Coner, featuring a stylized 'C' followed by a series of loops and a long horizontal stroke.

Christopher Coner, CHMM
Project Manager

JWG/:jam
Enclosure

c: Catherine Malagrida, UniFirst Corporation
MassDEP-NERO (as part of Status Report)

B:\Private\04516\2.0 Correspondence\2.4 Residences\Individual Residences\Washington Street\103 Washington\103 Washington St Redevelopment\Sampling Letters\9. February 2025 Sampling NOS\103 Washington NOS Ltr Feb 2025.docx



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

3 - 23246

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: 50 Tufts Street
City/Town: Somerville Zip Code: 02145-4129

B. This notice is being provided to the following party:

1. Name: Vera Barter- Hodan Property Management
2. Street Address: 105 Washington Street
City/Town: Somerville, MA Zip Code: 02143

C. This notice is being given to inform its recipient (the party listed in Section B):

- ☒ 1. That environmental sampling ~~will be~~/has been conducted at property owned by the recipient of this notice.
- ☐ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.
- ☐ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling ~~will be~~/has been conducted:

1. Street Address: 103 Washington Street
City/Town: Somerville, MA Zip Code: 02145-4426
2. MCP phase of work during which the sampling ~~will be~~/has been conducted:
- | | |
|---|--|
| ☐ Immediate Response Action | ☐ Phase III Feasibility Evaluation |
| ☐ Release Abatement Measure | ☐ Phase IV Remedy Implementation Plan |
| ☐ Utility-related Abatement Measure | ☒ Phase V/Remedy Operation Status |
| ☐ Phase I Initial Site Investigation | ☐ Post-Temporary Solution Operation, Maintenance and Monitoring |
| ☐ Phase II Comprehensive Site Assessment | ☐ Other _____ |
- (specify)
3. Description of property where sampling ~~will be~~/has been conducted:
- ☒ residential ☒ commercial ☐ industrial ☐ school/playground ☐ Other _____
- (specify)
4. Description of the sampling locations and types (e.g., soil, groundwater, indoor air, soil gas) to the extent known at the time of this notice.
- Indoor air and sub-slab soil vapor sampling

E. Contact information related to the party providing this notice:

Contact Name: Ileen Gladstone, P.E., LSP, LEED AP
Street Address: GEI Consultants, Inc., 400 Unicorn Park Drive
City/Town: Woburn, MA Zip Code: 01801-3341
Telephone: (781) 721-4012 Email: igladstone@geiconsultants.com



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

3

- 23246

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation of a release for which a notification to MassDEP has been made under the Massachusetts Contingency Plan (310 CMR 40.0300) on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at <http://www.mass.gov/eea/agencies/massdep/cleanup>. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See <http://public.dep.state.ma.us/SearchableSites2/Search.aspx> to view site-specific files on-line or <http://mass.gov/eea/agencies/massdep/about/contacts/conduct-a-file-review.html> if you would like to make an appointment to see these files in person. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

March 14, 2025
Project 045163

Ms. Vera Barter
Hodan Property Management
105 Washington Street
Somerville, MA 02143

**Re: Indoor Air and Sub-Slab Soil Vapor Sampling Results
103 Washington Street
Somerville, Massachusetts**

Dear Ms. Barter:

On behalf of the UniFirst Corporation, GEI Consultants, Inc. collected indoor air and sub-slab soil vapor samples on February 11, 2025, at your property at 103 Washington Street to evaluate the potential for vapor intrusion.

On February 11, 2025, one indoor air sample was collected on the first floor, one indoor air sample was collected in the basement, one indoor air sample was collected from a unit on the second floor, and one indoor air sample was collected in the second floor hallway. On February 21, 2025, one indoor air sample was collected again on the first floor because the original sample from February 11, 2025, malfunctioned and was not able to be analyzed. The first floor is commercial or ancillary space associated with residences, the units on the second floor are above the commercial space or above the open-air parking. The samples were collected over a 24-hour period. Attached is a summary table of the chemicals detected in the indoor air samples (Table 1), and the laboratory data sheets for the recent sampling.

Tetrachloroethylene (PCE) was detected in three samples. Concentrations of PCE were detected at 0.542 micrograms per meter cubed ($\mu\text{g}/\text{m}^3$) in the basement, 0.170 $\mu\text{g}/\text{m}^3$ in Unit 1 on the second-floor, and 0.312 $\mu\text{g}/\text{m}^3$ in the sample from the second-floor hallway. No other chlorinated volatile organic compounds (CVOCs) were detected in the samples.

On February 11, 2025, GEI collected two soil vapor samples from the previously installed sub-slab monitoring points to evaluate the concentrations of chlorinated VOCs in soil vapor beneath the building. Attached is a summary table of the chemicals detected in the soil vapor samples (Table 2) and the laboratory data sheets for the recent sampling.

PCE was detected in both samples at 1.36 $\mu\text{g}/\text{m}^3$ and 33.8 $\mu\text{g}/\text{m}^3$ in SV1 and SV2, respectively. Trichloroethylene (TCE) was detected in both samples at 0.193 $\mu\text{g}/\text{m}^3$ and 26.8 $\mu\text{g}/\text{m}^3$ in SV1 and SV2, respectively. Additionally, cis-1,2-dichloroethylene (cis-1,2-DCE) and trans-1,2-dichloroethylene (trans-1,2-DCE) were detected above the laboratory reporting limit in SV2. Trans-1,2-DCE was detected above the laboratory reporting limit in SV1.

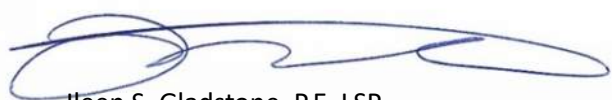
The detected indoor air and soil vapor concentrations are below the applicable MassDEP residential and commercial indoor air threshold values and soil vapor screening values. Soil vapor concentrations that are below the soil vapor screening values generally indicate that the vapor intrusion pathway is unlikely to be of concern under current conditions.

Individuals and public officials may request additional public involvement activities under the Massachusetts Contingency Plan (MCP; 310 CMR 40.1403(9) and 40.1404). The property owner may also request additional documentation, such as that listed at 310 CMR 40.0017(3), associated with the above-referenced samples. We will provide such additional documentation within 30 days of our receipt of such a request.

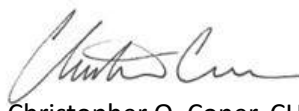
We appreciate your continued cooperation throughout the sampling process. If you have any questions regarding the sampling results, please do not hesitate to contact me at 781.721.4012 or igladstone@geiconsultants.com.

Sincerely,

GEI Consultants, Inc

A blue ink signature of Ileen S. Gladstone, consisting of a large, stylized 'G' followed by a horizontal line.

Ileen S. Gladstone, P.E, LSP
Senior Vice President

A blue ink signature of Christopher O. Coner, featuring a stylized 'C' and 'C'.

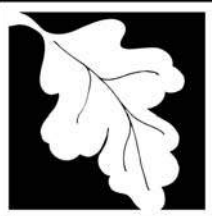
Christopher O. Coner, CHMM
Project Manager

JWG/MEF:jam

B:\Private\04516\2.0 Correspondence\2.4 Residences\Individual Residences\Washington Street\103 Washington\103 Washington St Redevelopment\Sampling Letters\10. February 2025 Results\103 Wash Feb Results Ltr.docx

Attachments

cc: Catherine Malagrida, UniFirst Corporation
MassDEP via Status Report



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

3 - 23246

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: 50 Tufts Street
City/Town: Somerville Zip Code: 02145-4129

B. This notice is being provided to the following party:

1. Name: Vera Barter- Hodan Property Management
2. Street Address: 105 Washington Street
City/Town: Somerville, MA Zip Code: 02143

C. This notice is being given to inform its recipient (the party listed in Section B):

- ☒ 1. That environmental sampling ~~will be~~/has been conducted at property owned by the recipient of this notice.
☐ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.
☐ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling ~~will be~~/has been conducted:

1. Street Address: 103 Washington Street
City/Town: Somerville, MA Zip Code: 02145-4426
2. MCP phase of work during which the sampling ~~will be~~/has been conducted:
- | | |
|---|--|
| ☐ Immediate Response Action | ☐ Phase III Feasibility Evaluation |
| ☐ Release Abatement Measure | ☐ Phase IV Remedy Implementation Plan |
| ☐ Utility-related Abatement Measure | ☒ Phase V/Remedy Operation Status |
| ☐ Phase I Initial Site Investigation | ☐ Post-Temporary Solution Operation, Maintenance and Monitoring |
| ☐ Phase II Comprehensive Site Assessment | ☐ Other _____ |
- (specify)
3. Description of property where sampling ~~will be~~/has been conducted:
☒ residential ☒ commercial ☐ industrial ☐ school/playground ☐ Other _____
(specify)
4. Description of the sampling locations and types (e.g., soil, groundwater, indoor air, soil gas) to the extent known at the time of this notice.
Indoor air and sub-slab soil vapor sampling

E. Contact information related to the party providing this notice:

Contact Name: Ileen Gladstone, P.E., LSP, LEED AP
Street Address: GEI Consultants, Inc., 400 Unicorn Park Drive
City/Town: Woburn, MA Zip Code: 01801-3341
Telephone: (781) 721-4012 Email: igladstone@geiconsultants.com



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

3

- 23246

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation of a release for which a notification to MassDEP has been made under the Massachusetts Contingency Plan (310 CMR 40.0300) on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at <http://www.mass.gov/eea/agencies/massdep/cleanup>. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See <http://public.dep.state.ma.us/SearchableSites2/Search.aspx> to view site-specific files on-line or <http://mass.gov/eea/agencies/massdep/about/contacts/conduct-a-file-review.html> if you would like to make an appointment to see these files in person. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Table 1 - Chemical Testing Results - Indoor Air
103 Washington Street
Somerville, Massachusetts

Sample Location:				First Floor										Basement							
Sample Name:				103Wash-F1 5/10/23		103Wash-F1 7/6/23		103Wash-F1 3/5/24		103Wash-F1 12/4/24		103Wash-F1 2/21/25		103Wash-B1 7/6/23		103Wash-B1 3/5/24		103Wash-B1 12/4/24		103Wash-B1 2/11/25	
Sample Date:				Units:																	
				µg/m3	ppbv	µg/m3	ppbv	µg/m3	ppbv	µg/m3	ppbv	µg/m3	ppbv	µg/m3	ppbv	µg/m3	ppbv	µg/m3	ppbv	µg/m3	ppbv
Analyte	Method	MassDEP Residential Indoor Air Threshold Values (µg/m ³)	MassDEP Commerical Indoor Air Threshold Values (µg/m ³)																		
Volatile Organic Compounds (VOCs)	TO-15																				
cis-1,2-Dichloroethylene		0.8	5.3	<0.079	<0.020	0.107	0.027	<0.079	<0.020	<0.079	<0.020	<0.079	<0.020	0.599	0.151	<0.079	<0.020	<0.079	<0.020	<0.079	<0.020
trans-1,2-Dichloroethylene		0.8	53	0.194	0.049	0.852	0.215	<0.079	<0.020	<0.079	<0.020	<0.079	<0.020	6.50	1.64	<0.079	<0.020	<0.079	<0.020	<0.079	<0.020
Tetrachloroethylene (PCE)		1.4	4.1	0.278	0.041	0.692	0.102	<0.136	<0.020	0.251	0.037	<0.136	<0.020	2.28	0.336	0.325	0.048	0.888	0.131	0.542	0.080
Trichloroethylene (TCE)		0.4	1.8	<0.107	<0.020	0.204	0.038	<0.107	<0.020	<0.107	<0.020	<0.107	<0.020	0.919	0.171	<0.107	<0.020	<0.107	<0.020	<0.107	<0.020

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. "<" = The analyte was not detected at a concentration above the specified laboratory reporting limit.
5. Results highlighted are the most recent samples collected.
6. A sample was not collected from the basement in May 2023 due to fresh air introduction during construction activities.

Table 1 - Chemical Testing Results - Indoor Air
103 Washington Street
Somerville, Massachusetts

Sample Location:				Second Floor							
Sample Name:				103Wash-UNIT1		103Wash-UNIT1		103Wash-UNIT3		103Wash-F2	
Sample Date:				12/4/24		2/11/25		12/4/24		2/11/25	
Units:				µg/m3	ppbv	µg/m3	ppbv	µg/m3	ppbv	µg/m3	ppbv
Analyte	Method	MassDEP Residential Indoor Air Threshold Values (µg/m ³)	MassDEP Commercial Indoor Air Threshold Values (µg/m ³)								
Volatile Organic Compounds (VOCs)	TO-15										
cis-1,2-Dichloroethylene		0.8	5.3	<0.079	<0.020	<0.079	<0.020	<0.079	<0.020	<0.079	<0.020
trans-1,2-Dichloroethylene		0.8	53	<0.079	<0.020	<0.079	<0.020	<0.079	<0.020	<0.079	<0.020
Tetrachloroethylene (PCE)		1.4	4.1	0.176	0.026	0.170	0.025	0.264	0.039	0.312	0.046
Trichloroethylene (TCE)		0.4	1.8	<0.107	<0.020	<0.107	<0.020	<0.107	<0.020	<0.107	<0.020

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. "<" = The analyte was not detected at a concentration above the specified laboratory reporting limit.
5. Results highlighted are the most recent samples collected.
6. A sample was not collected from the basement in May 2023 due to fresh air introduction during construction activities.

Table 2 - Chemical Testing Results - Sub-Slab Soil Vapor
103 Washington Street
Somerville, Massachusetts

				Location Name: 103 Washington Street									
				Sample Name: 103Wash-SV1									
				5/10/2023		7/6/2023		3/5/2024		12/4/2024		2/11/2025	
Units:				µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
Analyte	Method	Residential Sub-Slab Soil Gas Screening Values (µg/m ³)	Commercial Sub-Slab Soil Gas Screening Values (µg/m ³)										
Volatile Organic Compounds (VOCs)	TO-15												
1,1-Dichloroethane		56	50000	<0.081	<0.020	<0.081	<0.020	<0.081	<0.020	<0.081	<0.020	<0.081	<0.020
1,1-Dichloroethylene		56	12000	<0.079	<0.020	<0.079	<0.020	<0.079	<0.020	<0.079	<0.020	<0.079	<0.020
cis-1,2-Dichloroethylene		56	370	1.95	0.493	2.32	0.585	<0.079	<0.020	<0.079	<0.020	<0.079	<0.020
trans-1,2-Dichloroethylene		56	3700	1.17	0.295	2.39	0.603	<0.079	<0.020	<0.079	<0.020	0.194	0.049
Tetrachloroethylene (PCE)		98	290	28.5	4.21	51.5	7.60	0.210	0.031	2.87	0.423	1.36	0.201
1,1,1-Trichloroethane		210	310000	<0.109	<0.020	0.115	0.021	<0.109	<0.020	0.115	0.021	<0.109	<0.020
Trichloroethylene (TCE)		28	120	9.46	1.76	15.7	2.92	<0.107	<0.020	0.333	0.062	0.193	0.036

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. "<" = The analyte was not detected at a concentration above the specified laboratory reporting limit.
5. Results highlighted are the most recent samples collected.

Table 2 - Chemical Testing Results - Sub-Slab Soil Vapor
103 Washington Street
Somerville, Massachusetts

				Location Name: 103 Washington Street									
				Sample Name: 103Wash-SV2									
				5/10/2023		7/6/2023		3/5/2024		12/4/2024		2/11/2025	
Units:				µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
Analyte	Method	Residential Sub-Slab Soil Gas Screening Values (µg/m ³)	Commercial Sub-Slab Soil Gas Screening Values (µg/m ³)										
Volatile Organic Compounds (VOCs)	TO-15												
1,1-Dichloroethane		56	50000	<0.081	<0.020	<0.081	<0.020	<0.081	<0.020	0.125	0.031	<0.081	<0.020
1,1-Dichloroethylene		56	12000	<0.079	<0.020	0.107	0.027	<0.079	<0.020	<0.079	<0.020	<0.079	<0.020
cis-1,2-Dichloroethylene		56	370	9.48	2.39	19.2	4.83	12.2	3.07	6.94	1.75	13.9	3.50
trans-1,2-Dichloroethylene		56	3700	6.66	1.68	7.41	1.87	2.24	0.565	1.38	0.347	1.94	0.489
Tetrachloroethylene (PCE)		98	290	189	27.9	188	27.7	40.9	6.0	60.7	8.95	33.8	4.98
1,1,1-Trichloroethane		210	310000	0.175	0.032	0.278	0.051	<0.109	<0.020	0.218	0.040	<0.109	<0.020
Trichloroethylene (TCE)		28	120	98.3	18.3	130	24.1	37.6	7.00	28.9	5.37	26.8	4.98

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. "<" = The analyte was not detected at a concentration above the specified laboratory reporting limit.
5. Results highlighted are the most recent samples collected.

Project Name: TUFTS STREET**Project Number:** 045163**Lab Number:** L2507890**Report Date:** 02/26/25**SAMPLE RESULTS**

Lab ID: L2507890-02
 Client ID: 045163-103WASH-B1
 Sample Location: SOMERVILLE, MA

Date Collected: 02/11/25 11:09
 Date Received: 02/12/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 02/24/25 19:28
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.080	0.020	--	0.542	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	84		60-140
bromochloromethane	86		60-140
chlorobenzene-d5	89		60-140



Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2509911**Report Date:** 03/10/25**SAMPLE RESULTS**

Lab ID: L2509911-01
 Client ID: 045163-103WASH-F1
 Sample Location: SOMERVILLE, MA

Date Collected: 02/21/25 10:15
 Date Received: 02/21/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/04/25 07:40
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	87		60-140
bromochloromethane	91		60-140
chlorobenzene-d5	89		60-140



Project Name: TUFTS STREET**Project Number:** 045163**Lab Number:** L2507890**Report Date:** 02/26/25**SAMPLE RESULTS**

Lab ID: L2507890-03
 Client ID: 045163-103WASH-F2
 Sample Location: SOMERVILLE, MA

Date Collected: 02/11/25 11:30
 Date Received: 02/12/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 02/24/25 20:08
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.046	0.020	--	0.312	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	81		60-140
bromochloromethane	85		60-140
chlorobenzene-d5	88		60-140



Project Name: TUFTS STREET**Project Number:** 045163**Lab Number:** L2507890**Report Date:** 02/26/25**SAMPLE RESULTS**

Lab ID: L2507890-04
 Client ID: 045163-103WASH-UNIT1
 Sample Location: SOMERVILLE, MA

Date Collected: 02/11/25 11:25
 Date Received: 02/12/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 02/24/25 20:48
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.025	0.020	--	0.170	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	84		60-140
bromochloromethane	85		60-140
chlorobenzene-d5	91		60-140



Project Name: TUFTS STREET**Project Number:** 045163**Lab Number:** L2507890**Report Date:** 02/26/25**SAMPLE RESULTS**

Lab ID: L2507890-05
 Client ID: 045163-103WASH-SV1
 Sample Location: SOMERVILLE, MA

Date Collected: 02/11/25 13:07
 Date Received: 02/12/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil_Vapor
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 02/26/25 05:38
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	0.049	0.020	--	0.194	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	0.036	0.020	--	0.193	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.201	0.020	--	1.36	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	86		60-140
bromochloromethane	92		60-140
chlorobenzene-d5	91		60-140



Project Name: TUFTS STREET**Project Number:** 045163**Lab Number:** L2507890**Report Date:** 02/26/25**SAMPLE RESULTS**

Lab ID: L2507890-06
 Client ID: 045163-103WASH-SV2
 Sample Location: SOMERVILLE, MA

Date Collected: 02/11/25 13:05
 Date Received: 02/12/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil_Vapor
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 02/26/25 06:15
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	0.489	0.020	--	1.94	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	3.50	0.020	--	13.9	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	4.98	0.020	--	26.8	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	4.98	0.020	--	33.8	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	88		60-140
bromochloromethane	93		60-140
chlorobenzene-d5	94		60-140





Consulting
Engineers and
Scientists

February 19, 2025
Project 04516-3

Ms. Vera Barter
Hodan Property Management
105 Washington Street
Somerville, MA 02143

Dear Ms. Vera Barter:

**Re: Indoor Air and Soil Vapor Sampling
105 Washington Street
Somerville, Massachusetts**

Thank you for permitting GEI to conduct indoor air and soil vapor sampling at your property located at 105 Washington Street in Somerville, Massachusetts. Following sampling, we are providing you with a "Notice of Environmental Sampling Form (BWSC-123)," as required by the Massachusetts Department of Environmental Protection (MassDEP). We will also provide you with the results of the indoor air and soil vapor sampling after they are available from the analytical laboratory.

Thank you for your continued assistance. Please contact me at 781-721-4012 or igladstone@geiconsultants.com, if you have any questions.

Sincerely,

GEI CONSULTANTS, INC.

A blue ink signature of Heen S. Gladstone, consisting of a large, stylized 'H' followed by a long horizontal stroke.

Heen S. Gladstone, P.E., LSP, LEED AP
Senior Vice President

A blue ink signature of Christopher Coner, featuring a stylized 'C' and 'C'.

Christopher Coner, CHMM
Project Manager

JWG/:jam
Enclosure

c: Catherine Malagrida, UniFirst Corporation
MassDEP-NERO (as part of Status Report)

B:\Private\04516\2.0 Correspondence\2.4 Residences\Individual Residences\Washington Street\105-107 Washington\105 Washington Redevelopment\Sampling Letters\2025 NOS and Ltr\105 Washington NOS Ltr Feb 2025.docx



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

3 - 23246

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: 50 Tufts Street
City/Town: Somerville Zip Code: 02145-4129

B. This notice is being provided to the following party:

1. Name: Vera Barter- Hodan Property Management
2. Street Address: 105 Washington Street
City/Town: Somerville, MA Zip Code: 02143-4426

C. This notice is being given to inform its recipient (the party listed in Section B):

- ☒ 1. That environmental sampling ~~will be~~/has been conducted at property owned by the recipient of this notice.
- ☐ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.
- ☐ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling ~~will be~~/has been conducted:

1. Street Address: 105 Washington Street
City/Town: Somerville, MA Zip Code: 02143-4426
2. MCP phase of work during which the sampling ~~will be~~/has been conducted:
- | | |
|---|--|
| ☐ Immediate Response Action | ☐ Phase III Feasibility Evaluation |
| ☐ Release Abatement Measure | ☐ Phase IV Remedy Implementation Plan |
| ☐ Utility-related Abatement Measure | ☒ Phase V/Remedy Operation Status |
| ☐ Phase I Initial Site Investigation | ☐ Post-Temporary Solution Operation, Maintenance and Monitoring |
| ☐ Phase II Comprehensive Site Assessment | ☐ Other _____ |
- (specify)
3. Description of property where sampling ~~will be~~/has been conducted:
- ☒ residential ☒ commercial ☐ industrial ☐ school/playground ☐ Other _____
- (specify)
4. Description of the sampling locations and types (e.g., soil, groundwater, indoor air, soil gas) to the extent known at the time of this notice.
- Indoor Air and Sub-slab soil vapor sampling

E. Contact information related to the party providing this notice:

Contact Name: Ileen Gladstone, P.E., LSP, LEED AP
Street Address: GEI Consultants, Inc., 400 Unicorn Park Drive
City/Town: Woburn, MA Zip Code: 01801-3341
Telephone: (781) 721-4012 Email: igladstone@geiconsultants.com



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

3

- 23246

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation of a release for which a notification to MassDEP has been made under the Massachusetts Contingency Plan (310 CMR 40.0300) on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at <http://www.mass.gov/eea/agencies/massdep/cleanup>. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See <http://public.dep.state.ma.us/SearchableSites2/Search.aspx> to view site-specific files on-line or <http://mass.gov/eea/agencies/massdep/about/contacts/conduct-a-file-review.html> if you would like to make an appointment to see these files in person. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

March 14, 2025

Project 045163

Ms. Vera Barter
Hodan Property Management
105 Washington Street
Somerville, MA 02143

**Re: Indoor Air and Soil Vapor Sampling Results
105 Washington Street
Somerville, Massachusetts**

Dear Ms. Barter:

On behalf of the UniFirst Corporation, GEI Consultants, Inc. collected indoor air and soil vapor samples on February 11, 2025 at your property at 105 Washington Street to evaluate the potential for vapor intrusion.

On February 11, 2025, two indoor air samples were collected in the basement, one sample was collected on the first floor, and one sample was collected from the hallway on the second floor. The samples were collected over a 24-hour period. Attached is a summary table of the chemicals detected in the indoor air samples (Table 1), and the laboratory data sheets for the recent sampling.

Tetrachloroethylene (PCE) was detected in all four samples. Concentrations of PCE were detected at 0.705 micrograms per meter cubed ($\mu\text{g}/\text{m}^3$) on the first floor, 0.780 $\mu\text{g}/\text{m}^3$ and 0.292 $\mu\text{g}/\text{m}^3$ in the basement, and 0.271 $\mu\text{g}/\text{m}^3$ on the second floor. Trans-1,2-dichloroethylene (trans-1,2-DCE) was detected in the first-floor sample at a concentration of 0.087 $\mu\text{g}/\text{m}^3$.

GEI collected one soil vapor sample from the previously installed sub-slab monitoring point to evaluate the concentrations of chlorinated VOCs in soil vapor beneath the building. Attached is a summary table of the chemicals detected in the soil vapor samples (Table 2) and the laboratory data sheets for the recent sampling.

Concentrations of PCE and trans-1,2-dichloroethylene (trans-1,2-DCE) were detected above the laboratory reporting limits at concentrations of 0.420 $\mu\text{g}/\text{m}^3$ and 0.210 $\mu\text{g}/\text{m}^3$, respectively.

The detected indoor air and soil vapor concentrations are below the applicable MassDEP residential and commercial indoor air threshold values and soil vapor screening values. Soil vapor concentrations that are below the soil vapor screening values generally indicate that the vapor intrusion pathway is unlikely to be of concern under current conditions.

Individuals and public officials may request additional public involvement activities under the Massachusetts Contingency Plan (MCP; 310 CMR 40.1403(9) and 40.1404). The property owner may also request additional documentation, such as that listed at 310 CMR 40.0017(3), associated with the above-referenced samples. We will provide such additional documentation within 30 days of our receipt of such a request.

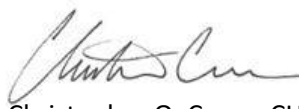
We appreciate your continued cooperation throughout the sampling process. If you have any questions regarding the sampling results, please do not hesitate to contact me at 781.721.4012 or igladstone@geiconsultants.com.

Sincerely,

GEI Consultants, Inc



Ileen S. Gladstone, P.E, LSP
Senior Vice President



Christopher O. Coner, CHMM
Project Manager

JWG/MEF:jam

B:\Private\04516\2.0 Correspondence\2.4 Residences\Individual Residences\Washington Street\105-107 Washington\105 Washington Redevelopment\Sampling Letters\2025 Feb Results\105 Wash Feb Results Ltr.docx

Attachments

cc: Catherine Malagrida, UniFirst Corporation
MassDEP via Status Report



**Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup**

BWSC123

This Notice is Related to:
Release Tracking Number

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

3 - 23246

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: 50 Tufts Street
City/Town: Somerville Zip Code: 02145-4129

B. This notice is being provided to the following party:

1. Name: Vera Barter- Hodan Property Management
2. Street Address: 105 Washington Street
City/Town: Somerville, MA Zip Code: 02143-4426

C. This notice is being given to inform its recipient (the party listed in Section B):

- ☒ 1. That environmental sampling ~~will be~~/has been conducted at property owned by the recipient of this notice.
☐ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.
☐ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling ~~will be~~/has been conducted:

1. Street Address: 105 Washington Street
City/Town: Somerville, MA Zip Code: 02143-4426
2. MCP phase of work during which the sampling ~~will be~~/has been conducted:
- | | |
|---|--|
| ☐ Immediate Response Action | ☐ Phase III Feasibility Evaluation |
| ☐ Release Abatement Measure | ☐ Phase IV Remedy Implementation Plan |
| ☐ Utility-related Abatement Measure | ☒ Phase V/Remedy Operation Status |
| ☐ Phase I Initial Site Investigation | ☐ Post-Temporary Solution Operation, Maintenance and Monitoring |
| ☐ Phase II Comprehensive Site Assessment | ☐ Other _____ |
- (specify)
3. Description of property where sampling ~~will be~~/has been conducted:
☒ residential ☒ commercial ☐ industrial ☐ school/playground ☐ Other _____
(specify)
4. Description of the sampling locations and types (e.g., soil, groundwater, indoor air, soil gas) to the extent known at the time of this notice.
Indoor Air and Sub-slab soil vapor sampling

E. Contact information related to the party providing this notice:

Contact Name: Ileen Gladstone, P.E., LSP, LEED AP
Street Address: GEI Consultants, Inc., 400 Unicorn Park Drive
City/Town: Woburn, MA Zip Code: 01801-3341
Telephone: (781) 721-4012 Email: igladstone@geiconsultants.com



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

3

- 23246

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation of a release for which a notification to MassDEP has been made under the Massachusetts Contingency Plan (310 CMR 40.0300) on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at <http://www.mass.gov/eea/agencies/massdep/cleanup>. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See <http://public.dep.state.ma.us/SearchableSites2/Search.aspx> to view site-specific files on-line or <http://mass.gov/eea/agencies/massdep/about/contacts/conduct-a-file-review.html> if you would like to make an appointment to see these files in person. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Table 1 - Chemical Testing Results - Indoor Air
105 Washington Street
Somerville, Massachusetts

Sample Location: Sample Name: Sample Date: Units:				Basement																	
				105WASH-B1 3/15/22		105WASH-B2 3/15/22		105WASH-B1 2/15/23		105WASH-B1 5/10/23		105WASH-B2 5/10/23		105WASH-B1 12/4/24		105WASH-B2 12/4/24		105WASH-B1 2/11/25		105WASH-B2 2/11/25	
				µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv
Analyte	Method	MassDEP Residential Indoor Air Threshold Values (µg/m³)	MassDEP Commerical Indoor Air Threshold Values (µg/m³)																		
Volatile Organic Compounds (VOCs)	TO-15																				
1,1-Dichloroethane		0.8	710	0.247	0.061	0.113	0.028	<0.081	<0.020	0.174	0.043	0.101	0.025	<0.081	<0.020	<0.081	<0.020	<0.081	<0.020	<0.081	<0.020
trans-1,2-Dichloroethene		0.8	53	<0.079	<0.020	<0.079	<0.020	<0.079	<0.020	<0.079	<0.020	<0.079	<0.020	<0.079	<0.020	<0.079	<0.020	<0.079	<0.020	<0.079	<0.020
Tetrachloroethylene (PCE)		1.4	4.1	1.15	0.169	0.57	0.084	0.549	0.081	0.841	0.124	0.536	0.079	1.37	0.202	0.312	0.046	0.780	0.115	0.292	0.043
Trichloroethylene (TCE)		0.4	1.8	0.247	0.027	<0.107	<0.020	<0.107	<0.020	0.129	0.024	<0.107	<0.020	<0.107	<0.020	<0.107	<0.020	<0.107	<0.020	<0.107	<0.020

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. "<" = The analyte was not detected at a concentration above the specified laboratory reporting limit.
5. Results highlighted are the most recent samples collected.

Table 1 - Chemical Testing Results - Indoor Air
105 Washington Street
Somerville, Massachusetts

Sample Location: Sample Name: Sample Date: Units:				First Floor										Second Floor			
				105WASH-FF1 3/15/22		105WASH-FF1 2/15/23		105WASH-FF1 5/10/23		105WASH-F1 12/4/24		105WASH-F1 2/11/25		105WASH-F2 12/4/24		105WASH-F2 2/11/25	
				µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv
Analyte	Method	MassDEP Residential Indoor Air Threshold Values (µg/m³)	MassDEP Commerical Indoor Air Threshold Values (µg/m³)														
Volatile Organic Compounds (VOCs)	TO-15																
1,1-Dichloroethane		0.8	710	0.267	0.066	0.138	0.034	0.121	0.03	<0.081	<0.020	<0.081	<0.020	<0.081	<0.020	<0.081	<0.020
trans-1,2-Dichloroethene		0.8	53	<0.079	<0.020	<0.079	<0.020	<0.079	<0.020	<0.079	<0.020	0.087	0.022	<0.079	<0.020	<0.079	<0.020
Tetrachloroethylene (PCE)		1.4	4.1	1.05	0.155	1.38	0.203	0.373	0.055	1.40	0.206	0.705	0.104	0.400	0.059	0.271	0.040
Trichloroethylene (TCE)		0.4	1.8	0.14	0.026	<0.107	<0.020	<0.107	<0.020	0.107	0.020	<0.107	<0.020	<0.107	<0.020	<0.107	<0.020

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. "<" = The analyte was not detected at a concentration above the specified laboratory reporting limit.
5. Results highlighted are the most recent samples collected.

Table 2 - Chemical Testing Results - Sub-Slab Soil Vapor
105 Washington Street
Somerville, Massachusetts

				105 Washington Street													
				105Wash-SV1		105Wash-SV2		105Wash-SV2		105Wash-SV2		105Wash-SV2		105Wash-SV2		105Wash-SV2	
				8/4/2021		8/4/2021		3/15/2022		2/15/2023		5/10/2023		12/4/2024		2/11/2025	
				Units:													
Analyte	Method	Residential Sub-Slab Soil Gas Screening Values (µg/m³)	Commercial Sub-Slab Soil Gas Screening Values (µg/m³)	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv
Volatile Organic Compounds (VOCs)	TO-15																
cis-1,2-Dichloroethylene		56	370	<0.793	<0.200	<0.793	<0.200	<0.793	<0.200	<0.079	<0.020	<0.079	<0.020	0.091	0.023	<0.079	<0.020
trans-1,2-Dichloroethylene		0.8	53	<0.793	<0.200	<0.793	<0.200	<0.793	<0.200	<0.079	<0.020	<0.079	<0.020	<0.079	<0.020	0.210	0.053
Tetrachloroethylene (PCE)		98	290	132	19.5	110	16.2	4.69	0.691	0.658	0.097	1.86	0.274	1.20	0.177	0.420	0.062
1,1,2-Trichloroethane		10	50	<1.09	<0.200	<1.09	<0.200	<1.09	<0.200	<0.109	<0.020	<0.109	<0.020	0.115	0.021	<0.109	<0.020
Trichloroethylene (TCE)		28	120	8.44	1.57	8.97	1.67	<1.07	<0.200	<0.107	<0.020	0.215	0.04	0.263	0.049	<0.107	<0.020

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. "<" = The analyte was not detected at a concentration above the specified laboratory reporting limit.
5. Results highlighted are the most recent samples collected.

Project Name: TUFTS STREET**Project Number:** 045163**Lab Number:** L2507880**Report Date:** 02/26/25**SAMPLE RESULTS**

Lab ID: L2507880-01
 Client ID: 045163-105WASH-F1
 Sample Location: SOMERVILLE, MA

Date Collected: 02/11/25 11:12
 Date Received: 02/12/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 02/25/25 03:21
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	0.022	0.020	--	0.087	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.104	0.020	--	0.705	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	86		60-140
bromochloromethane	87		60-140
chlorobenzene-d5	92		60-140



Project Name: TUFTS STREET**Project Number:** 045163**Lab Number:** L2507880**Report Date:** 02/26/25**SAMPLE RESULTS**

Lab ID: L2507880-02
 Client ID: 045163-105WASH-B1
 Sample Location: SOMERVILLE, MA

Date Collected: 02/11/25 10:36
 Date Received: 02/12/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 02/25/25 04:00
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.115	0.020	--	0.780	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	86		60-140
bromochloromethane	87		60-140
chlorobenzene-d5	92		60-140



Project Name: TUFTS STREET**Project Number:** 045163**Lab Number:** L2507880**Report Date:** 02/26/25**SAMPLE RESULTS**

Lab ID: L2507880-03
 Client ID: 045163-105WASH-B2
 Sample Location: SOMERVILLE, MA

Date Collected: 02/11/25 11:14
 Date Received: 02/12/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 02/25/25 04:40
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.043	0.020	--	0.292	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	84		60-140
bromochloromethane	86		60-140
chlorobenzene-d5	90		60-140



Project Name: TUFTS STREET**Project Number:** 045163**Lab Number:** L2507880**Report Date:** 02/26/25**SAMPLE RESULTS**

Lab ID: L2507880-04
 Client ID: 045163-105WASH-F2
 Sample Location: SOMERVILLE, MA

Date Collected: 02/11/25 11:19
 Date Received: 02/12/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 02/25/25 05:20
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.040	0.020	--	0.271	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	80		60-140
bromochloromethane	83		60-140
chlorobenzene-d5	86		60-140



Project Name: TUFTS STREET**Project Number:** 045163**Lab Number:** L2507880**Report Date:** 02/26/25**SAMPLE RESULTS**

Lab ID: L2507880-05
 Client ID: 045163-105WASH-SV2
 Sample Location: SOMERVILLE, MA

Date Collected: 02/11/25 12:50
 Date Received: 02/12/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil_Vapor
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 02/26/25 04:59
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	0.053	0.020	--	0.210	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.062	0.020	--	0.420	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	87		60-140
bromochloromethane	93		60-140
chlorobenzene-d5	92		60-140





Consulting
Engineers and
Scientists

February 19, 2025
Project 04516-3

Martin Kwok
166-168 Glen Street
Somerville, MA 02145

Dear Mr. Kwok:

**Re: Indoor Air Sampling
166-168 Glen Street
Somerville, Massachusetts**

Thank you for permitting GEI to conduct indoor air sampling at your property located at 166-168 Glen Street in Somerville, Massachusetts. Prior to sampling, we are providing you with a "Notice of Environmental Sampling Form (BWSC-123)," as required by the Massachusetts Department of Environmental Protection (MassDEP). We will also provide you with the results of the indoor air sampling after they are available from the analytical laboratory.

Thank you for your continued assistance. Please contact me at 781-721-4012 or igladstone@geiconsultants.com, if you have any questions.

Sincerely,

GEI CONSULTANTS, INC.

A blue ink signature of Ileen S. Gladstone, consisting of a large, stylized loop followed by a horizontal line.

Ileen S. Gladstone, P.E., LSP, LEED AP
Senior Vice President

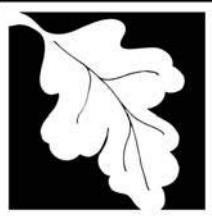
A blue ink signature of Christopher Coner, featuring a stylized, cursive script.

Christopher Coner, CHMM
Project Manager

JWG:/jam
Enclosure

c: Catherine Malagrida, UniFirst Corporation
MassDEP-NERO (as part of Status Report)

B:\Private\04516\2.0 Correspondence\2.4 Residences\Individual Residences\Glen Street\166-168 Glen\2025 Sampling Letters\166-168 Glen NOS Ltr Feb 2025.docx



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

3 - 23246

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: 50 Tufts Street
City/Town: Somerville, MA Zip Code: 02145-4129

B. This notice is being provided to the following party:

1. Name: Martin Kwok
2. Street Address: 166-168 Glen Street
City/Town: Somerville, MA Zip Code: 02145

C. This notice is being given to inform its recipient (the party listed in Section B):

- ☒ 1. That environmental sampling will be/~~has been~~ conducted at property owned by the recipient of this notice.
☐ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.
☐ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/~~has been~~ conducted:

1. Street Address: 166-168 Glen Street
City/Town: Somerville, MA Zip Code: 02145-4135
2. MCP phase of work during which the sampling will be/~~has been~~ conducted:
- | | |
|---|--|
| ☐ Immediate Response Action | ☐ Phase III Feasibility Evaluation |
| ☐ Release Abatement Measure | ☐ Phase IV Remedy Implementation Plan |
| ☐ Utility-related Abatement Measure | ☒ Phase V/Remedy Operation Status |
| ☐ Phase I Initial Site Investigation | ☐ Post-Temporary Solution Operation, Maintenance and Monitoring |
| ☐ Phase II Comprehensive Site Assessment | ☐ Other _____ |
- (specify)
3. Description of property where sampling will be/~~has been~~ conducted:
☒ residential ☐ commercial ☐ industrial ☐ school/playground ☐ Other _____
(specify)
4. Description of the sampling locations and types (e.g., soil, groundwater, indoor air, soil gas) to the extent known at the time of this notice.
Indoor air sampling

E. Contact information related to the party providing this notice:

Contact Name: Ileen Gladstone, P.E., LSP, LEED AP
Street Address: GEI Consultants, Inc., 400 Unicorn Park Drive
City/Town: Woburn, MA Zip Code: 01801-3341
Telephone: (781) 721-4012 Email: igladstone@geiconsultants.com



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

3

- 23246

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation of a release for which a notification to MassDEP has been made under the Massachusetts Contingency Plan (310 CMR 40.0300) on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at <http://www.mass.gov/eea/agencies/massdep/cleanup>. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See <http://public.dep.state.ma.us/SearchableSites2/Search.aspx> to view site-specific files on-line or <http://mass.gov/eea/agencies/massdep/about/contacts/conduct-a-file-review.html> if you would like to make an appointment to see these files in person. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

April 3, 2025
Project 045163

Mr. Martin Kwok
166-168 Glen Street
Somerville, MA 02143

**Re: Indoor Air Sampling Results
166-168 Glen Street, Somerville, Massachusetts**

Dear Mr. Kwok:

On behalf of the UniFirst Corporation, GEI Consultants, Inc. collected indoor air samples on February 21, 2025, at your property at 166-168 Glen Street to evaluate the potential for vapor intrusion.

On February 21, 2025, one indoor air sample was collected in the basement and one sample was collected on the first floor. The samples were collected over a 24-hour period. Attached is a summary table of the chemicals detected in the indoor air samples (Table 1), and the laboratory data sheets for the recent sampling.

Tetrachloroethylene (PCE) was detected in two samples. Concentrations of PCE were detected at 1.12 micrograms per meter cubed ($\mu\text{g}/\text{m}^3$) on the first floor and 0.407 $\mu\text{g}/\text{m}^3$ in the basement. Trans-1,2-dichloroethylene (trans-1,2-DCE) was detected in the basement sample at a concentration of 0.230 $\mu\text{g}/\text{m}^3$.

The detected indoor air concentrations are below the applicable MassDEP residential and commercial indoor air threshold values.

Individuals and public officials may request additional public involvement activities under the Massachusetts Contingency Plan (MCP; 310 CMR 40.1403(9) and 40.1404). The property owner may also request additional documentation, such as that listed at 310 CMR 40.0017(3), associated with the above-referenced samples. We will provide such additional documentation within 30 days of our receipt of such a request.

We appreciate your continued cooperation throughout the sampling process. If you have any questions regarding the sampling results, please do not hesitate to contact me at 781.721.4012 or igladstone@geiconsultants.com.

Sincerely,

GEI Consultants, Inc



Ileen S. Gladstone, P.E, LSP
Senior Vice President



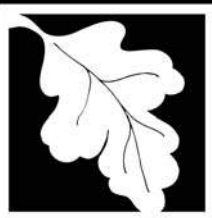
Christopher O. Coner, CHMM
Project Manager

NMT/MEF:jam

B:\Private\04516\2.0 Correspondence\2.4 Residences\Individual Residences\Glen Street\166-168 Glen\2025 Sampling Letters\February Results\166-168 Glen Feb Results Ltr.docx

Attachments

cc: Catherine Malagrida, UniFirst Corporation
MassDEP via Status Report



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

3 - 23246

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: 50 Tufts Street
City/Town: Somerville, MA Zip Code: 02145-4129

B. This notice is being provided to the following party:

1. Name: Martin Kwok
2. Street Address: 166-168 Glen Street
City/Town: Somerville, MA Zip Code: 02145

C. This notice is being given to inform its recipient (the party listed in Section B):

- ☒ 1. That environmental sampling ~~will be~~/has been conducted at property owned by the recipient of this notice.
- ☒ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.
- ☒ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling ~~will be~~/has been conducted:

1. Street Address: 166-168 Glen Street
City/Town: Somerville, MA Zip Code: 02145-4135
2. MCP phase of work during which the sampling ~~will be~~/has been conducted:
- | | |
|---|--|
| ☐ Immediate Response Action | ☐ Phase III Feasibility Evaluation |
| ☐ Release Abatement Measure | ☐ Phase IV Remedy Implementation Plan |
| ☐ Utility-related Abatement Measure | ☒ Phase V/Remedy Operation Status |
| ☐ Phase I Initial Site Investigation | ☐ Post-Temporary Solution Operation, Maintenance and Monitoring |
| ☐ Phase II Comprehensive Site Assessment | ☐ Other _____ |
- (specify)
3. Description of property where sampling ~~will be~~/has been conducted:
- ☒ residential ☐ commercial ☐ industrial ☐ school/playground ☐ Other _____
- (specify)
4. Description of the sampling locations and types (e.g., soil, groundwater, indoor air, soil gas) to the extent known at the time of this notice.

Indoor air sampling

E. Contact information related to the party providing this notice:

Contact Name: Ileen Gladstone, P.E., LSP, LEED AP
Street Address: GEI Consultants, Inc., 400 Unicorn Park Drive
City/Town: Woburn, MA Zip Code: 01801-3341
Telephone: (781) 721-4012 Email: igladstone@geiconsultants.com



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

3

- 23246

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation of a release for which a notification to MassDEP has been made under the Massachusetts Contingency Plan (310 CMR 40.0300) on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at <http://www.mass.gov/eea/agencies/massdep/cleanup>. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See <http://public.dep.state.ma.us/SearchableSites2/Search.aspx> to view site-specific files on-line or <http://mass.gov/eea/agencies/massdep/about/contacts/conduct-a-file-review.html> if you would like to make an appointment to see these files in person. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Table 1 - Chemical Testing Results - Pre- and Post-EPMM Indoor Air
166-168 Glen Street
Somerville, Massachusetts

Sample Location:		Pre-EPMM 166-168 Glen Street				Post-EPMM 166-168 Glen Street															
Sample Name:		166GLEN-1		166GLEN-B		166GLEN-1		166GLEN-B		166-168GLEN-1		166-168GLEN-B		166GLEN-1		166GLEN-B		166GLEN-F1		166GLEN-B1	
Sample Date:		9/7/07		9/7/07		11/30/10		11/30/10		2/5/11		2/5/11		12/14/11		12/14/11		2/21/25		2/21/25	
Units:		µg/m3	ppbv	µg/m3	ppbv	µg/m3	ppbv	µg/m3	ppbv	µg/m3	ppbv	µg/m3	ppbv	µg/m3	ppbv	µg/m3	ppbv	µg/m3	ppbv	µg/m3	ppbv
Analyte	Method																				
Volatile Organic Compounds (VOCs)		TO-15																			
1,1,1-Trichloroethane (TCA)		0.47 J	0.087 J	0.65J	0.12 J	< 1.1 J+	< 0.20 J+	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.6	< 0.30	< 1.1	< 0.20	<0.109	<0.020	<0.109	<0.020
1,1,2,2-Tetrachloroethane		<1.4	<0.20	<1.4	<0.20	<1.4 J+	< 0.20 J+	<1.4	< 0.20	<1.4	< 0.20	<1.4	< 0.20	<2.1	< 0.30	<1.4	< 0.20	<0.137	<0.020	<0.137	<0.020
1,1,2-Trichloroethane		<1.1	<0.20	<1.1	<0.20	<1.1 J+	< 0.20 J+	<1.1	< 0.20	<1.1	< 0.20	<1.1	< 0.20	<1.6	< 0.30	<1.1	< 0.20	<0.109	<0.020	<0.109	<0.020
1,1-Dichloroethane		<0.81	<0.20	<0.81	<0.20	<0.81 J+	< 0.20 J+	<0.81	< 0.20	<0.81	< 0.20	<0.81	< 0.20	<1.2	< 0.30	<0.81	< 0.20	<0.081	<0.020	<0.081	<0.020
1,1-Dichloroethene		<0.79	<0.20	<0.79	<0.20	<0.79 J+	< 0.20 J+	<0.79	< 0.20	<0.79	< 0.20	<0.79	< 0.20	<1.2	< 0.30	<0.79	< 0.20	<0.079	<0.020	<0.079	<0.020
Carbon tetrachloride		0.88 J	0.14 J	0.75 J	0.12 J	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
cis-1,2-Dichloroethene		<0.79	<0.20	<0.79	<0.20	<0.79 J+	< 0.20 J+	<0.79	< 0.20	<0.79	< 0.20	<0.79	< 0.20	<1.2	< 0.30	<0.79	< 0.20	<0.079	<0.020	<0.079	<0.020
Tetrachloroethylene (PCE)		5.0	0.74	4.1	0.61	< 1.4 J+	< 0.20 J+	< 1.4	< 0.20	< 1.4	< 0.20	< 1.4	< 0.20	< 2.0	< 0.30	< 1.4	< 0.20	1.12	0.165	0.407	0.060
trans-1,2-Dichloroethene		<0.79	<0.20	<0.79	<0.20	<0.79 J+	< 0.20 J+	<0.79	< 0.20	<0.79	< 0.20	<0.79	< 0.20	<1.2	< 0.30	<0.79	< 0.20	<0.079	<0.020	0.230	0.058
Trichloroethene		<1.1	<0.20	<1.1	<0.20	<1.1 J+	< 0.20 J+	<1.1	< 0.20	<1.1	< 0.20	<1.1	< 0.20	<1.6	< 0.30	<1.1	< 0.20	<0.107	<0.020	<0.107	<0.020
Vinyl chloride		<0.51	<0.20	<0.51	<0.20	<0.51 J+	< 0.20 J+	<0.51	< 0.20	<0.51	< 0.20	<0.51	< 0.20	<0.77	<0.30	<0.51	< 0.20	<0.051	<0.020	<0.051	<0.020

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the attached laboratory data sheets.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. EPMM = Exposure Pathway Mitigation Measure.
5. NT= Not tested
6. Highlighted sample indicates most recent sampling round.

Qualifying Note:

J The reported result is below the laboratory reporting limit and is estimated.

Project Name: TUFTS ST**Lab Number:** L2509884**Project Number:** 045163**Report Date:** 03/11/25**SAMPLE RESULTS**

Lab ID: L2509884-01
 Client ID: 045163-166GLEN-F1
 Sample Location: SOMERVILLE, MA

Date Collected: 02/21/25 09:02
 Date Received: 02/21/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/09/25 18:04
 Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.165	0.020	--	1.12	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	87		60-140
bromochloromethane	91		60-140
chlorobenzene-d5	88		60-140



Project Name: TUFTS ST**Lab Number:** L2509884**Project Number:** 045163**Report Date:** 03/11/25**SAMPLE RESULTS**

Lab ID: L2509884-02
 Client ID: 045163-166GLEN-B1
 Sample Location: SOMERVILLE, MA

Date Collected: 02/21/25 09:04
 Date Received: 02/21/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/09/25 18:42
 Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	0.058	0.020	--	0.230	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.060	0.020	--	0.407	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	93		60-140
bromochloromethane	96		60-140
chlorobenzene-d5	98		60-140



Table B-1. Correspondence Tracking
Phase V Status Report No. 28 and Remedial Monitoring Report No. 43
Residential and Commercial Properties
Somerville, Massachusetts

Property	Date	Communication
84 Franklin Street	March and April 2025	Mailed certified letters regarding environmental conditions
	April 28, 2025	Email from homeowner following up on GEI's previous correspondence. GEI and homeowner scheduled sampling for May 6, 2025.
	June 16, 2025	Email from homeowner requesting results from sampling, GEI provided the following day.
91-93 Franklin Street	February 2025	Email to contact to schedule indoor air sampling.
	February 2025	Letter to homeowner for notification of sampling.
	April 2025	Mailed letter to homeowner with sampling data results.
95R Franklin Street	March 26, 2025	Followup from property management about previous letters GEI has mailed
97 Franklin Street	February 14, 2025	GEI left a voicemail to schedule indoor air and soil vapor sampling
	April 4, 2025	Mailed letter to homeowner with sampling data results.
166-168 Glen Street	February 14, 2025	Email with homeowner to schedule indoor air sampling
	April 3, 2025	Email correspondence with indoor air sampling results letter
9 Knowlton Street	April 2025	Email correspondence with homeowner regarding EPMM.
17 Knowlton Street	February 20, 2025	Email with homeowner to schedule sampling
	April 4, 2025	Email correspondence with indoor air sampling results letter
32 Knowlton Street	February 21, 2025	Phone call to schedule indoor air sampling
	April 4, 2025	Mailed indoor air sampling results letter
34 Knowlton Street	February 14, 2025	Phone call to schedule indoor air sampling
	February 26, 2025	Homeowner email response to request for vapor pin installation. Agreed to not install the vapor pin at the homeowner request.
	March 24, 2025	Email to schedule resample due to ambient indoor air canister
	April 15, 2025	Email correspondence with indoor air sampling results letter
35-37 Knowlton Street	February 28, 2025	Email to schedule site visit to locate radio node location after renovation
	March 18, 2025	Follow up phone call about node installation
10 Morton Street	Monthly, 2025	Emails and phone communication with homeowner to discuss renovation schedule, site walks, and sampling coordination.
11 Morton Street	February 2025	Emails with homeowner to schedule sampling
	April 3, 2025	Email with homeowner to schedule sampling
	April 30, 2025	Email with homeowner to schedule followup IA sampling and confirmation
	June 25, 2025	GEI email with results and request for phone call
13 Morton Street	February 22, 2025	Email request to measure sump pit in basement
	May 14, 2025	Email to schedule basement repairs, and homeowner request for later in summer due to absence
19-19A Morton Street	February 19, 2025	Email with homeowner to schedule indoor air sampling and coordination with tenants
	April 4, 2025	Email correspondence with indoor air sampling results letter
21 Morton Street	February 12, 2025	Email to schedule indoor air sampling and soil vapor point installation
	March 27, 2025	Email correspondence with indoor air sampling results letter
31 Tufts Street	January 31, 2025	Email to schedule indoor air sampling and closing the vent one week prior, also provided data from September sampling event at owner request
	April 4, 2025	Email correspondence with indoor air sampling results letter and follow-up question/answer on results from owner
103 Washington Street	January 6, 2025	Email request for indoor air sampling results collected in December 2024.
	January 10, 2025	GEI provided indoor air and soil vapor sampling results via email.
	January 27, 2025	Email correspondence to schedule additional sampling at 105 and 103 Washington Street
	February 3, 2025	GEI email response to question about "partial release" referring to the Partial Permanent Solution Statement being prepared for the property.
	February 19, 2025	Email to schedule follow up sampling due to faulty indoor air canister
	March 14, 2025	Email correspondence with indoor air and soil vapor sampling results letter
	June 13, 2025	Request from owner on update for PPSS, GEI email response that it was filed that day.
105-107 Washington Street	January 27, 2025	Email correspondence to schedule additional sampling at 105 and 103 Washington Street
	March 14, 2025	Email correspondence with indoor air and soil vapor sampling results letter
121 Washington Street	Monthly, 2025	Emails and phone communication with developer's site supervisor to discuss renovation schedule, site walks, and sampling coordination.

General Notes:

1. EPMM = Exposure Pathway Mitigation Measure.

Appendix C Kleinfelder Soil, GLX Soil Precharacterization Data, and Contained-In Determinations



Tables

Location			Start Date		End Date		WS-1		WS-2		WS-3		WS-4		WS-5		WS-6		WS-7		WS-8		WS-9		WS-10		WS-11		WS-12		WS-13		WS-14		WS-15		WS-16		WS-17		WS-18		WS-19		WS-20		WS-21		WS-22		WS-23		WS-24		WS-25		WS-26		WS-27		WS-28		WS-29		WS-30		WS-31		WS-32		WS-33		WS-34		WS-35		WS-36		WS-37		WS-38		WS-39		WS-40		WS-41		WS-42		WS-43		WS-44		WS-45		WS-46		WS-47		WS-48		WS-49		WS-50		WS-51		WS-52		WS-53		WS-54		WS-55		WS-56		WS-57		WS-58		WS-59		WS-60		WS-61		WS-62		WS-63		WS-64		WS-65		WS-66		WS-67		WS-68		WS-69		WS-70		WS-71		WS-72		WS-73		WS-74		WS-75		WS-76		WS-77		WS-78		WS-79		WS-80		WS-81		WS-82		WS-83		WS-84		WS-85		WS-86		WS-87		WS-88		WS-89		WS-90		WS-91		WS-92		WS-93		WS-94		WS-95		WS-96		WS-97		WS-98		WS-99		WS-100		WS-101		WS-102		WS-103		WS-104		WS-105		WS-106		WS-107		WS-108		WS-109		WS-110		WS-111		WS-112		WS-113		WS-114		WS-115		WS-116		WS-117		WS-118		WS-119		WS-120		WS-121		WS-122		WS-123		WS-124		WS-125		WS-126		WS-127		WS-128		WS-129		WS-130		WS-131		WS-132		WS-133		WS-134		WS-135		WS-136		WS-137		WS-138		WS-139		WS-140		WS-141		WS-142		WS-143		WS-144		WS-145		WS-146		WS-147		WS-148		WS-149		WS-150		WS-151		WS-152		WS-153		WS-154		WS-155		WS-156		WS-157		WS-158		WS-159		WS-160		WS-161		WS-162		WS-163		WS-164		WS-165		WS-166		WS-167		WS-168		WS-169		WS-170		WS-171		WS-172		WS-173		WS-174		WS-175		WS-176		WS-177		WS-178		WS-179		WS-180		WS-181		WS-182		WS-183		WS-184		WS-185		WS-186		WS-187		WS-188		WS-189		WS-190		WS-191		WS-192		WS-193		WS-194		WS-195		WS-196		WS-197		WS-198		WS-199		WS-200		WS-201		WS-202		WS-203		WS-204		WS-205		WS-206		WS-207		WS-208		WS-209		WS-210		WS-211		WS-212		WS-213		WS-214		WS-215		WS-216		WS-217		WS-218		WS-219		WS-220		WS-221		WS-222		WS-223		WS-224		WS-225		WS-226		WS-227		WS-228		WS-229		WS-230		WS-231		WS-232		WS-233		WS-234		WS-235		WS-236		WS-237		WS-238		WS-239		WS-240		WS-241		WS-242		WS-243		WS-244		WS-245		WS-246		WS-247		WS-248		WS-249		WS-250		WS-251		WS-252		WS-253		WS-254		WS-255		WS-256		WS-257		WS-258		WS-259		WS-260		WS-261		WS-262		WS-263		WS-264		WS-265		WS-266		WS-267		WS-268		WS-269		WS-270		WS-271		WS-272		WS-273		WS-274		WS-275		WS-276		WS-277		WS-278		WS-279		WS-280		WS-281		WS-282		WS-283		WS-284		WS-285		WS-286		WS-287		WS-288		WS-289		WS-290		WS-291		WS-292		WS-293		WS-294		WS-295		WS-296		WS-297		WS-298		WS-299		WS-300		WS-301		WS-302		WS-303		WS-304		WS-305		WS-306		WS-307		WS-308		WS-309		WS-310		WS-311		WS-312		WS-313		WS-314		WS-315		WS-316		WS-317		WS-318		WS-319		WS-320		WS-321		WS-322		WS-323		WS-324		WS-325		WS-326		WS-327		WS-328		WS-329		WS-330		WS-331		WS-332		WS-333		WS-334		WS-335		WS-336		WS-337		WS-338		WS-339		WS-340		WS-341		WS-342		WS-343		WS-344		WS-345		WS-346		WS-347		WS-348		WS-349		WS-350		WS-351		WS-352		WS-353		WS-354		WS-355		WS-356		WS-357		WS-358		WS-359		WS-360		WS-361		WS-362		WS-363		WS-364		WS-365		WS-366		WS-367		WS-368		WS-369		WS-370		WS-371		WS-372		WS-373		WS-374		WS-375		WS-376		WS-377		WS-378		WS-379		WS-380		WS-381		WS-382		WS-383		WS-384		WS-385		WS-386		WS-387		WS-388		WS-389		WS-390		WS-391		WS-392		WS-393		WS-394		WS-395		WS-396		WS-397		WS-398		WS-399		WS-400		WS-401		WS-402		WS-403		WS-404		WS-405		WS-406		WS-407		WS-408		WS-409		WS-410		WS-411		WS-412		WS-413		WS-414		WS-415		WS-416		WS-417		WS-418		WS-419		WS-420		WS-421		WS-422		WS-423		WS-424		WS-425		WS-426		WS-427		WS-428		WS-429		WS-430		WS-431		WS-432		WS-433		WS-434		WS-435		WS-436		WS-437		WS-438		WS-439		WS-440		WS-441		WS-442		WS-443		WS-444		WS-445		WS-446		WS-447		WS-448		WS-449		WS-450		WS-451		WS-452		WS-453		WS-454		WS-455		WS-456		WS-457		WS-458		WS-459		WS-460		WS-461		WS-462		WS-463		WS-464		WS-465		WS-466		WS-467		WS-468		WS-469		WS-470		WS-471		WS-472		WS-473		WS-474		WS-475		WS-476		WS-477		WS-478		WS-479		WS-480		WS-481		WS-482		WS-483		WS-484		WS-485		WS-486		WS-487		WS-488		WS-489		WS-490		WS-491		WS-492		WS-493		WS-494		WS-495		WS-496		WS-497		WS-498		WS-499		WS-500		WS-501		WS-502		WS-503		WS-504		WS-505		WS-506		WS-507		WS-508		WS-509		WS-510		WS-511		WS-512		WS-513		WS-514		WS-515		WS-516		WS-517		WS-518		WS-519		WS-520		WS-521		WS-522		WS-523		WS-524		WS-525		WS-526		WS-527		WS-528		WS-529		WS-530		WS-531		WS-532		WS-533		WS-534		WS-535		WS-536		WS-537		WS-538		WS-539		WS-540		WS-541		WS-542		WS-543		WS-544		WS-545		WS-546		WS-547		WS-548		WS-549		WS-550		WS-551		WS-552		WS-553		WS-554		WS-555		WS-556		WS-557		WS-558		WS-559		WS-560		WS-561		WS-562		WS-563		WS-564		WS-565		WS-566		WS-567		WS-568		WS-569		WS-570		WS-571		WS-572		WS-573		WS-574		WS-575		WS-576		WS-577		WS-578		WS-579		WS-580		WS-581		WS-582		WS-583		WS-584		WS-585		WS-586		WS-587		WS-588		WS-589		WS-590		WS-591		WS-592		WS-593		WS-594		WS-595		WS-596		WS-597		WS-598		WS-599		WS-600		WS-601		WS-602		WS-603		WS-604		WS-605		WS-606		WS-607		WS-608		WS-609		WS-610		WS-611		WS-612		WS-613		WS-614		WS-615		WS-616		WS-617		WS-618		WS-619		WS-620		WS-621		WS-622		WS-623		WS-624		WS-625		WS-626		WS-627		WS-628		WS-629		WS-630		WS-631		WS-632		WS-633		WS-634		WS-635		WS-636		WS-637		WS-638		WS-639		WS-640		WS-641		WS-642		WS-643		WS-644		WS-645		WS-646		WS-647		WS-648		WS-649		WS-650		WS-651		WS-652		WS-653		WS-654		WS-655		WS-656		WS-657		WS-658		WS-659		WS-660		WS-661		WS-662		WS-663		WS-664		WS-665		WS-666		WS-667		WS-668		WS-669		WS-670		WS-671		WS-672		WS-673		WS-674		WS-675		WS-676		WS-677		WS-678		WS-679		WS-680		WS-681		WS-682		WS-683		WS-684		WS-685		WS-686		WS-687		WS-688		WS-689		WS-690		WS-691		WS-692		WS-693		WS-694		WS-695		WS-696		WS-697		WS-698		WS-699		WS-700		WS-701		WS-702		WS-703		WS-704		WS-705		WS-706		WS-707		WS-708		WS-709		WS-710		WS-711		WS-712		WS-713		WS-714		WS-715		WS-716		WS-717		WS-718		WS-719		WS-720		WS-721		WS-722		WS-723		WS-724		WS-725		WS-726		WS-727		WS-728		WS-729		WS-730		WS-731		WS-732		WS-733		WS-734		WS-735		WS-736		WS-737		WS-738		WS-739		WS-740		WS-741		WS-742		WS-743		WS-744		WS-745		WS-746		WS-747		WS-748		WS-749		WS-750		WS-751		WS-752		WS-753		WS-754		WS-755		WS-756		WS-757		WS-758		WS-759		WS-760		WS-761		WS-762		WS-763		WS-764		WS-765		WS-766		WS-767		WS-768		WS-769		WS-770		WS-771		WS-772		WS-773		WS-774		WS-775		WS-776		WS-777		WS-778		WS-779		WS-780		WS-781		WS-782		WS-783		WS-784		WS-785		WS-786		WS-787		WS-788		WS-789		WS-790		WS-791		WS-792		WS-793		WS-794		WS-795		WS-796		WS-797		WS-798		WS-799		WS-800		WS-801		WS-802		WS-803		WS-804		WS-805		WS-806		WS-807		WS-808		WS-809		WS-810		WS-811		WS-812		WS-813		WS-814		WS-815		WS-816		WS-817		WS-818		WS-819		WS-820		WS-821		WS-822		WS-823		WS-824		WS-825		WS-826		WS-827		WS-828		WS-829		WS-830		WS-831		WS-832		WS-833		WS-834		WS-835		WS-836		WS-837		WS-838		WS-839		WS-840		WS-841		WS-842		WS-843		WS-844		WS-845		WS-846		WS-847		WS-848		WS-849		WS-850		WS-851		WS-852		WS-853		WS-854		WS-855		WS-856		WS-857		WS-858		WS-859		WS-860		WS-861		WS-862		WS-863		WS-864		WS-865		WS-866		WS-867		WS-868		WS-869		WS-870		WS-871		WS-872		WS-873		WS-874		WS-875		WS-876		WS-877		WS-878		WS-879		WS-880		WS-881		WS-882		WS-883		WS-884		WS-885		WS-886		WS-887		WS-888		WS-889		WS-890		WS-891		WS-892		WS-893		WS-894		WS-895		WS-896		WS-897		WS-898		WS-899		WS-900		WS-901		WS-902		WS-903		WS-904		WS-905		WS-906		WS-907		WS-908		WS-909		WS-910		WS-911		WS-912		WS-913		WS-914		WS-915		WS-916		WS-917		WS-918		WS-919		WS-920		WS-921		WS-922		WS-923		WS-924		WS-925		WS-926		WS-927		WS-928		WS-929		WS-930		WS-931		WS-932		WS-933		WS-934		WS-935		WS-936		WS-937		WS-938		WS-939		WS-940		WS-941		WS-942		WS-943		WS-944		WS-945		WS-946		WS-947		WS-948		WS-949		WS-950		WS-951		WS-952		WS-953		WS-954		WS-955		WS-956		WS-957		WS-958			
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Location		KE-211-WB		KE-211-WB	
Start Depth		0		24	
Sample Date		3/29/2014		3/29/2014	
Analyte	RC-S-1	Unit	Result	Unit	Result
1,1,1,2-Tetrachloroethane	0.1	mg/kg	< 0.0023		< 0.0015
1,1,1,2,2-Pentachloroethane	0.005	mg/kg	< 0.0011		< 0.00076
1,1,2,2-Tetrachloroethane	0.1	2	mg/kg	< 0.0023	< 0.0015
1,1-Dichloroethane	0.4	9	mg/kg	< 0.0023	< 0.0015
1,2-Dichloroethane	0.01	mg/kg	< 0.0023		< 0.0015
1,1,1-Trichloroethane	0.1	mg/kg	< 0.0023		< 0.0015
1,2,2-Trichloroethane	100	1000	mg/kg	< 0.0023	< 0.0015
1,2,3-Trichloropropane	10	100	mg/kg	< 0.0023	< 0.0015
1,2,3,4-Tetrachlorobutane	10	100	mg/kg	< 0.0023	< 0.0015
1,2,4,4-Tetrachlorobutane	10	100	mg/kg	< 0.0023	< 0.0015
1,2-Dichloro-3-chloropropane	10	100	mg/kg	< 0.0011	< 0.00076
1,2-Dichloro-4-chloropropane	10	100	mg/kg	< 0.0011	< 0.00076
1,2-Dichloroethane	0.1	0.1	mg/kg	< 0.0023	< 0.0015
1,2-Dichloropropane	0.1	0.1	mg/kg	< 0.0023	< 0.0015
1,3,5-Trimethylbenzene	10	100	mg/kg	< 0.0023	< 0.0015
1,3,4-Dimethylbenzene	10	100	mg/kg	< 0.0023	< 0.0015
1,3-Dichloropropane	500	5000	mg/kg	< 0.0011	< 0.00076
1,4-Dichlorobenzene	0.7	1	mg/kg	< 0.0023	< 0.0015
1,4-Dioxane	0.2	8	mg/kg	< 0.11	< 0.076
1,4-Dichlorobenzene	0.1	1	mg/kg	< 0.0023	< 0.0015
2-Butanol	4	50	mg/kg	0.046	< 0.031
2-Chlorobenzene	100	1000	mg/kg	< 0.0023	< 0.0015
2-Hexanone	100	1000	mg/kg	< 0.0023	< 0.0015
2-Pentanol	100	1000	mg/kg	< 0.0023	< 0.0015
4-Propyltoluene	100	1000	mg/kg	< 0.0023	< 0.0015
4-Methyl-2-pentanone	0.4	50	mg/kg	< 0.023	< 0.015
Aniline	8	50	mg/kg	< 0.11	< 0.076
Acetone	100	1000	mg/kg	< 0.0023	< 0.0015
Bromochloromethane	500	1000	mg/kg	< 0.0023	< 0.0015
Bromochloroethane	0.1	0.1	mg/kg	< 0.0023	< 0.0015
Bromochloropropane	0.5	0.5	mg/kg	< 0.11	< 0.076
Bromomethane	0.5	0.5	mg/kg	< 0.11	< 0.076
Carbon disulfide	100	1000	mg/kg	< 0.0046	< 0.0046
Carbon tetrachloride	5	5	mg/kg	< 0.0023	< 0.0015
Chlorobenzene	100	1000	mg/kg	< 0.0011	< 0.0076
Chloroform	0.2	0.2	mg/kg	< 0.0046	< 0.0031
Chloromethane	100	1000	mg/kg	< 0.0011	< 0.0076
1,2-Dichlorobutene	0.1	0.1	mg/kg	< 0.0023	< 0.0015
cis-1,3-Dichloropropene	0.01	0.1	mg/kg	< 0.0011	< 0.00076
trans-1,3-Dichloropropene	0.005	0.03	mg/kg	< 0.0011	< 0.00076
Dibromochloromethane	1000	10000	mg/kg	< 0.0011	< 0.0076
Dibromodichloromethane	100	1000	mg/kg	< 0.0011	< 0.0076
Diethyl ether	100	1000	mg/kg	< 0.0011	< 0.0076
Ethyl tert-butyl ether	100	1000	mg/kg	< 0.0011	< 0.0076
Hexachlorocyclopentadiene	50	100	mg/kg	< 0.0046	< 0.0031
Isopropyl ether	100	1000	mg/kg	< 0.0011	< 0.00076
Isopropylbenzene	1000	10000	mg/kg	< 0.0023	< 0.0015
Methyl acetate	100	1000	mg/kg	< 0.0011	< 0.0076
Methyl tert-butyl ether	0.1	20	mg/kg	< 0.0046	< 0.0031
Methylene chloride	0.1	20	mg/kg	< 0.0011	< 0.0076
Naphthalene	4	20	mg/kg	< 0.0011	< 0.0076
o-Xylene	100	1000	mg/kg	< 0.0023	< 0.0015
Propylbenzene	100	1000	mg/kg	< 0.0023	< 0.0015
sec-Butylbenzene	100	1000	mg/kg	< 0.0023	< 0.0015
tert-Butylbenzene	100	1000	mg/kg	< 0.0011	< 0.00076
tert-Butyl methyl ether	100	1000	mg/kg	< 0.0046	< 0.0031
Tetrachloroethylene	10	10	mg/kg	0.07	< 0.0015
Tetrahydrofuran	100	1000	mg/kg	< 0.0011	< 0.0076
Toluene	50	1000	mg/kg	< 0.0023	< 0.0015
trans-1,2-Dichloroethylene	1	1	mg/kg	< 0.0023	< 0.0015
trans-1,2-Dichloropropene	0.01	0.1	mg/kg	< 0.0046	< 0.0031
Trichloroethylene	100	1000	mg/kg	< 0.0011	< 0.0076
Vinyl chloride	0.7	0.7	mg/kg	< 0.0011	< 0.0076

Notes:

Bold - Analyte detected above laboratory detection limits

Bold and Shaded (Blue) - Analyte detected above RC-S-1

Shaded (Blue) - Analyte detected above RC-S-2

Bold and Gray (N) - RC-S

- No standard for mitigation

NT - Not tested

Summary of Phase 1 Soil Sample Analytical Results
MBTA Green Line Extension Project
Washington Street
Somerville, Massachusetts

LOCATION							GLX-TPW-306-1		GLX-TPW-307-1.5		GLX-TPW-307-1.5		GLX-TPW-201-1.5		GLX-TPW-201-7		GLX-TPW-308-0.5	
SAMPLING DATE							5/23/2019		5/23/2019		5/23/2019		5/23/2019		5/23/2019		5/23/2019	
LAB SAMPLE ID							L1921946-01		L1921946-04		L1921946-04 R1		L1921946-07		L1921946-13		L1921946-16	
SAMPLE TYPE							SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE DEPTH (ft.)																		
	CasNum	MA-LLAND	MA-ULAND	RCS-1-14	S-1	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry																		
Solids, Total	NONE					%	93.3		87.9		-	-	86.8		81.1		94.2	
MCP Volatile Organics by EPA 5035																		
Methylene chloride	75-09-2			0.1	NS	mg/kg	0.0043	U	0.0064	U	0.0058	U	0.3	U	0.0043	U	0.21	U
1,1-Dichloroethane	75-34-3			0.4	0.4	mg/kg	0.00086	U	0.0013	U	0.0012	U	0.059	U	0.00085	U	0.042	U
Chloroform	67-66-3			0.2	0.2	mg/kg	0.0013	U	0.0019	U	0.0018	U	0.089	U	0.0013	U	0.063	U
Carbon tetrachloride	56-23-5			5	5	mg/kg	0.00086	U	0.0013	U	0.0012	U	0.059	U	0.00085	U	0.042	U
1,2-Dichloropropane	78-87-5			0.1	0.1	mg/kg	0.00086	U	0.0013	U	0.0012	U	0.059	U	0.00085	U	0.042	U
Dibromochloromethane	124-48-1			0.005	0.005	mg/kg	0.00086	U	0.0013	U	0.0012	U	0.059	U	0.00085	U	0.042	U
1,1,2-Trichloroethane	79-00-5			0.1	0.1	mg/kg	0.00086	U	0.0013	U	0.0012	U	0.059	U	0.00085	U	0.042	U
Tetrachloroethene	127-18-4			1	1	mg/kg	0.0006		0.00064	U	0.00058	U	0.03	U	0.0066		1.1	
Chlorobenzene	108-90-7			1	1	mg/kg	0.00043	U	0.00064	U	0.00058	U	0.03	U	0.00043	U	0.021	U
Trichlorofluoromethane	75-69-4			1000	NS	mg/kg	0.0034	U	0.0051	U	0.0047	U	0.24	U	0.0034	U	0.17	U
1,2-Dichloroethane	107-06-2			0.1	0.1	mg/kg	0.00086	U	0.0013	U	0.0012	U	0.059	U	0.00085	U	0.042	U
1,1,1-Trichloroethane	71-55-6			30	30	mg/kg	0.00043	U	0.0009		0.00058	U	0.03	U	0.002		0.021	U
Bromodichloromethane	75-27-4			0.1	0.1	mg/kg	0.00043	U	0.00064	U	0.00058	U	0.03	U	0.00043	U	0.021	U
trans-1,3-Dichloropropene	10061-02-6			0.01	NS	mg/kg	0.00086	U	0.0013	U	0.0012	U	0.059	U	0.00085	U	0.042	U
cis-1,3-Dichloropropene	10061-01-5			0.01	NS	mg/kg	0.00043	U	0.00064	U	0.00058	U	0.03	U	0.00043	U	0.021	U
1,3-Dichloropropene, Total	542-75-6			0.01	0.01	mg/kg	0.00043	U	0.00064	U	0.00058	U	0.03	U	0.00043	U	0.021	U
1,1-Dichloropropene	563-58-6				NS	mg/kg	0.00043	U	0.00064	U	0.00058	U	0.03	U	0.00043	U	0.021	U
Bromoform	75-25-2			0.1	0.1	mg/kg	0.0034	U	0.0051	U	0.0047	U	0.24	U	0.0034	U	0.17	U
1,1,2,2-Tetrachloroethane	79-34-5			0.005	0.005	mg/kg	0.00043	U	0.00064	U	0.00058	U	0.03	U	0.00043	U	0.021	U
Benzene	71-43-2			2	2	mg/kg	0.00043	U	0.00064	U	0.00058	U	0.03	U	0.00043	U	0.021	U
Toluene	108-88-3			30	30	mg/kg	0.00086	U	0.0013	U	0.0012	U	0.059	U	0.00085	U	0.042	U
Ethylbenzene	100-41-4			40	40	mg/kg	0.00086	U	0.0013	U	0.0012	U	0.059	U	0.00085	U	0.042	U
Chloromethane	74-87-3			100	NS	mg/kg	0.0034	U	0.0051	U	0.0047	U	0.24	U	0.0034	U	0.17	U
Bromomethane	74-83-9			0.5	0.5	mg/kg	0.0017	U	0.0026	U	0.0023	U	0.12	U	0.0017	U	0.084	U
Vinyl chloride	75-01-4			0.7	0.7	mg/kg	0.00086	U	0.0013	U	0.0012	U	0.059	U	0.00085	U	0.042	U
Chloroethane	75-00-3			100	NS	mg/kg	0.0017	U	0.0026	U	0.0023	U	0.12	U	0.0017	U	0.084	U
1,1-Dichloroethene	75-35-4			3	3	mg/kg	0.00086	U	0.0013	U	0.0012	U	0.059	U	0.00085	U	0.042	U
trans-1,2-Dichloroethene	156-60-5			1	1	mg/kg	0.0013	U	0.0019	U	0.0018	U	0.089	U	0.0013	U	0.063	U
Trichloroethene	79-01-6			0.3	0.3	mg/kg	0.00043	U	0.00064	U	0.00058	U	0.03	U	0.0007		0.03	
1,2-Dichlorobenzene	95-50-1			9	9	mg/kg	0.0017	U	0.0026	U	0.0023	U	0.12	U	0.0017	U	0.084	U
1,3-Dichlorobenzene	541-73-1			3	3	mg/kg	0.0017	U	0.0026	U	0.0023	U	0.12	U	0.0017	U	0.084	U
1,4-Dichlorobenzene	106-46-7			0.7	0.7	mg/kg	0.0017	U	0.0026	U	0.0023	U	0.12	U	0.0017	U	0.084	U
Methyl tert butyl ether	1634-04-4			0.1	0.1	mg/kg	0.0017	U	0.0026	U	0.0023	U	0.12	U	0.0017	U	0.084	U
p/m-Xylene	179601-23-1			100	100	mg/kg	0.0017	U	0.0026	U	0.0023	U	0.12	U	0.0017	U	0.084	U
o-Xylene	95-47-6			100	100	mg/kg	0.00086	U	0.0013	U	0.0012	U	0.059	U	0.00085	U	0.042	U
Xylenes, Total	1330-20-7			100	100	mg/kg	0.00086	U	0.0013	U	0.0012	U	0.059	U	0.00085	U	0.042	U
cis-1,2-Dichloroethene	156-59-2			0.1	0.1	mg/kg	0.00086	U	0.0013	U	0.0012	U	0.059	U	0.00085	U	0.042	U
1,2-Dichloroethene, Total	540-59-0				NS	mg/kg	0.00086	U	0.0013	U	0.0012	U	0.059	U	0.00085	U	0.042	U
Dibromomethane	74-95-3			500	NS	mg/kg	0.0017	U	0.0026	U	0.0023	U	0.12	U	0.0017	U	0.084	U
1,2,3-Trichloropropane	96-18-4			100	NS	mg/kg	0.0017	U	0.0026	U	0.0023	U	0.12	U	0.0017	U	0.084	U
Styrene	100-42-5			3	3	mg/kg	0.00086	U	0.0013	U	0.0012	U	0.059	U	0.00085	U	0.042	U
Dichlorodifluoromethane	75-71-8			1000	NS	mg/kg	0.0086	U	0.013	U	0.012	U	0.59	U	0.0085	U	0.42	U
Acetone	67-64-1			6	6	mg/kg	0.23		0.052		0.032		0.59	U	0.049		0.42	U
Carbon disulfide	75-15-0			100	NS	mg/kg	0.0086	U	0.013	U	0.012	U	0.59	U	0.0085	U	0.42	U
Methyl ethyl ketone	78-93-3			4	4	mg/kg	0.0086	U	0.013	U	0.012	U	0.59	U	0.0085	U	0.42	U
Methyl isobutyl ketone	108-10-1			0.4	0.4	mg/kg	0.0086	U	0.013	U	0.012	U	0.59	U	0.0085	U	0.42	U
2-Hexanone	591-78-6			100	NS	mg/kg	0.0086	U	0.013	U	0.012	U	0.59	U	0.0085	U	0.42	U
Bromochloromethane	74-97-5				NS	mg/kg	0.0017	U	0.0026	U	0.0023	U	0.12	U	0.0017	U	0.084	U
Tetrahydrofuran	109-99-9			500	NS	mg/kg	0.0034	U	0.0051	U	0.0047	U	0.24	U	0.0034	U	0.17	U
2,2-Dichloropropane	594-20-7				NS	mg/kg	0.0017	U	0.0026	U	0.0023	U	0.12	U	0.0017	U	0.084	U
1,2-Dibromoethane	106-93-4			0.1	NS	mg/kg	0.00086	U	0.0013	U	0.0012	U	0.059	U	0.00085	U	0.042	U
1,3-Dichloropropane	142-28-9			500	NS	mg/kg	0.0017	U	0.0026	U	0.0023	U	0.12	U	0.0017	U	0.084	U
1,1,1,2-Tetrachloroethane	630-20-6			0.1	0.1	mg/kg	0.00043	U	0.00064	U	0.00058	U	0.03	U	0.00043	U	0.021	U
Bromobenzene	108-86-1			100	NS	mg/kg	0.0017	U	0.0026	U	0.0023	U	0.12	U	0.0017	U	0.084	U
n-Butylbenzene	104-51-8				NS	mg/kg	0.00086	U	0.0013	U	0.0012	U	0.059	U	0.00085	U	0.042	U
sec-Butylbenzene	135-98-8				NS	mg/kg	0.00086	U	0.0013	U	0.0012	U	0.059	U	0.00085	U	0.042	U
tert-Butylbenzene	98-06-6			100	NS	mg/kg	0.0017	U	0.0026	U	0.0023	U	0.12	U	0.0017	U	0.084	U
o-Chlorotoluene	95-49-8			100	NS	mg/kg	0.0017	U	0.0026	U	0.0023	U	0.12	U	0.0017	U	0.084	U
p-Chlorotoluene	106-43-4				NS	mg/kg	0.0017	U	0.0026	U	0.0023	U	0.12	U	0.0017	U	0.084	U
1,2-Dibromo-3-chloropropane	96-12-8			10	NS	mg/kg	0.0026	U	0.0038	U	0.0035	U	0.18	U	0.0026	U	0.13	U
Hexachlorobutadiene	87-68-3			30	30	mg/kg	0.0034	U	0.0051	U	0.0047	U	0.24	U	0.0034	U	0.17	U
Isopropylbenzene	98-82-8			1000	NS	mg/kg	0.00086	U	0.0013	U	0.0012	U	0.059	U	0.00085	U	0.042	U

Summary of Phase 1 Soil Sample Analytical Results
MBTA Green Line Extension Project
Washington Street
Somerville, Massachusetts

LOCATION								GLX-TPW-306-1		GLX-TPW-307-1.5		GLX-TPW-307-1.5		GLX-TPW-201-1.5		GLX-TPW-201-7		GLX-TPW-308-0.5	
SAMPLING DATE								5/23/2019		5/23/2019		5/23/2019		5/23/2019		5/23/2019		5/23/2019	
LAB SAMPLE ID								L1921946-01		L1921946-04		L1921946-04 R1		L1921946-07		L1921946-13		L1921946-16	
SAMPLE TYPE								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE DEPTH (ft.)																			
		CasNum	MA-LLAND	MA-ULAND	RCS-1-14	S-1	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
MCP Volatile Organics by EPA 5035																			
	p-Isopropyltoluene	99-87-6			100	NS	mg/kg	0.00086	U	0.0013	U	0.0012	U	0.059	U	0.00085	U	0.042	U
	Naphthalene	91-20-3			4	4	mg/kg	0.0034	U	0.0051	U	0.0047	U	0.24	U	0.0034	U	0.17	U
	n-Propylbenzene	103-65-1			100	NS	mg/kg	0.00086	U	0.0013	U	0.0012	U	0.059	U	0.00085	U	0.042	U
	1,2,3-Trichlorobenzene	87-61-6				NS	mg/kg	0.0017	U	0.0026	U	0.0023	U	0.12	U	0.0017	U	0.084	U
	1,2,4-Trichlorobenzene	120-82-1			2	2	mg/kg	0.0017	U	0.0026	U	0.0023	U	0.12	U	0.0017	U	0.084	U
	1,3,5-Trimethylbenzene	108-67-8			10	NS	mg/kg	0.0017	U	0.0026	U	0.0023	U	0.12	U	0.0017	U	0.084	U
	1,2,4-Trimethylbenzene	95-63-6			1000	NS	mg/kg	0.0017	U	0.0026	U	0.0023	U	0.12	U	0.0017	U	0.084	U
	Diethyl ether	60-29-7			100	NS	mg/kg	0.0017	U	0.0026	U	0.0023	U	0.12	U	0.0017	U	0.084	U
	Diisopropyl Ether	108-20-3			100	NS	mg/kg	0.0017	U	0.0026	U	0.0023	U	0.12	U	0.0017	U	0.084	U
	Ethyl-Tert-Butyl-Ether	637-92-3				NS	mg/kg	0.0017	U	0.0026	U	0.0023	U	0.12	U	0.0017	U	0.084	U
	Tertiary-Amyl Methyl Ether	994-05-8				NS	mg/kg	0.0017	U	0.0026	U	0.0023	U	0.12	U	0.0017	U	0.084	U
	1,4-Dioxane	123-91-1			0.2	0.2	mg/kg	0.068	U	0.1	U	0.094	U	4.7	U	0.068	U	3.4	U
	Total VOCs		10	4			mg/kg												

Yellow shading indicates detected result is equal to or above one or more of the listed criteria.

Gray shading indicates nondetect detection limit is above one or more of the listed criteria.

Bold typeface indicates detection above metiond detection limit.

MA-LLAND: Lined Landfill Limits current as of August, 1997
MA-ULAND: UnLined Landfill Limits current as of August, 1997
RCS-1-14: MCP 2014 RCS-1 Reportable Concentrations Criteria effective April 25, 2014.
MCP 2014 S-1 Cleanup Criteria effective April 25, 2014; the lowest S-1/GW-X standard is shown.
**EPA-TCLP: EPA Toxicity Characteristic (TCLP) Regulatory Levels Criteria per 40CFR Part 261 as of September 10, 2015.

U - Not detected at the reported detection limit for the sample.
ND - Not detected.
E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

¹ - The laboratory reported two sets of VOC results due to internal standard and/or surrogate nonconformances.
The highest detected results and lowest detection limits have been tabulated. Refer to laboratory report for further detail.

² - The laboratory reported three sets of VOC results due to internal standard and/or surrogate nonconformances.
The highest detected results from the low-level analysis and detection limits from the high-level analysis have been tabulated due to significant internal standard issues with the low-level analysis. Refer to laboratory report for further detail.

Summary of Phase 1 Soil Sample Analytical Results
MBTA Green Line Extension Project
Washington Street
Somerville, Massachusetts

LOCATION							GLX-TPW-309-0.5		GLX-TPW-310-0.5		GLX-TPW-311-0.5		GLX-TPW-215-2.5		GLX-TPW-501-4.5		GLX-TPW-502-2.5	
SAMPLING DATE							5/23/2019		5/23/2019		5/23/2019		5/23/2019		5/23/2019		5/23/2019	
LAB SAMPLE ID							L1921946-19		L1921946-22		L1921946-25		L1921946-28		L1921946-31		L1921946-32	
SAMPLE TYPE							SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE DEPTH (ft.)																		
	CasNum	MA-LLAND	MA-ULAND	RCS-1-14	S-1	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry																		
Solids, Total	NONE					%	94.6		93.3		96.4		92.1		89.4		93.3	
MCP Volatile Organics by EPA 5035																		
Methylene chloride	75-09-2			0.1	NS	mg/kg	0.28	U	0.24	U	0.0035	U	0.0048	U	0.0037	U	0.0042	U
1,1-Dichloroethane	75-34-3			0.4	0.4	mg/kg	0.057	U	0.048	U	0.0007	U	0.00095	U	0.00075	U	0.00085	U
Chloroform	67-66-3			0.2	0.2	mg/kg	0.085	U	0.072	U	0.001	U	0.0014	U	0.0011	U	0.0013	U
Carbon tetrachloride	56-23-5			5	5	mg/kg	0.057	U	0.048	U	0.0007	U	0.00095	U	0.00075	U	0.00085	U
1,2-Dichloropropane	78-87-5			0.1	0.1	mg/kg	0.057	U	0.048	U	0.0007	U	0.00095	U	0.00075	U	0.00085	U
Dibromochloromethane	124-48-1			0.005	0.005	mg/kg	0.057	U	0.048	U	0.0007	U	0.00095	U	0.00075	U	0.00085	U
1,1,2-Trichloroethane	79-00-5			0.1	0.1	mg/kg	0.057	U	0.048	U	0.0007	U	0.00095	U	0.00075	U	0.00085	U
Tetrachloroethene	127-18-4			1	1	mg/kg	1.9		0.43		0.00035	U	0.0088		0.0011		0.00096	
Chlorobenzene	108-90-7			1	1	mg/kg	0.028	U	0.024	U	0.00035	U	0.00048	U	0.00037	U	0.00042	U
Trichlorofluoromethane	75-69-4			1000	NS	mg/kg	0.23	U	0.19	U	0.0028	U	0.0038	U	0.003	U	0.0034	U
1,2-Dichloroethane	107-06-2			0.1	0.1	mg/kg	0.057	U	0.048	U	0.0007	U	0.00095	U	0.00075	U	0.00085	U
1,1,1-Trichloroethane	71-55-6			30	30	mg/kg	0.028	U	0.024	U	0.00035	U	0.00048	U	0.0011		0.0022	
Bromodichloromethane	75-27-4			0.1	0.1	mg/kg	0.028	U	0.024	U	0.00035	U	0.00048	U	0.00037	U	0.00042	U
trans-1,3-Dichloropropene	10061-02-6			0.01	NS	mg/kg	0.057	U	0.048	U	0.0007	U	0.00095	U	0.00075	U	0.00085	U
cis-1,3-Dichloropropene	10061-01-5			0.01	NS	mg/kg	0.028	U	0.024	U	0.00035	U	0.00048	U	0.00037	U	0.00042	U
1,3-Dichloropropene, Total	542-75-6			0.01	0.01	mg/kg	0.028	U	0.024	U	0.00035	U	0.00048	U	0.00037	U	0.00042	U
1,1-Dichloropropene	563-58-6				NS	mg/kg	0.028	U	0.024	U	0.00035	U	0.00048	U	0.00037	U	0.00042	U
Bromoform	75-25-2			0.1	0.1	mg/kg	0.23	U	0.19	U	0.0028	U	0.0038	U	0.003	U	0.0034	U
1,1,2,2-Tetrachloroethane	79-34-5			0.005	0.005	mg/kg	0.028	U	0.024	U	0.00035	U	0.00048	U	0.00037	U	0.00042	U
Benzene	71-43-2			2	2	mg/kg	0.028	U	0.024	U	0.00035	U	0.00048	U	0.00037	U	0.00042	U
Toluene	108-88-3			30	30	mg/kg	0.057	U	0.048	U	0.0007	U	0.00095	U	0.0018		0.00085	U
Ethylbenzene	100-41-4			40	40	mg/kg	0.057	U	0.048	U	0.0007	U	0.00095	U	0.00075	U	0.00085	U
Chloromethane	74-87-3			100	NS	mg/kg	0.23	U	0.19	U	0.0028	U	0.0038	U	0.003	U	0.0034	U
Bromomethane	74-83-9			0.5	0.5	mg/kg	0.11	U	0.096	U	0.0014	U	0.0019	U	0.0015	U	0.0017	U
Vinyl chloride	75-01-4			0.7	0.7	mg/kg	0.057	U	0.048	U	0.0007	U	0.00095	U	0.00075	U	0.00085	U
Chloroethane	75-00-3			100	NS	mg/kg	0.11	U	0.096	U	0.0014	U	0.0019	U	0.0015	U	0.0017	U
1,1-Dichloroethene	75-35-4			3	3	mg/kg	0.057	U	0.048	U	0.0007	U	0.00095	U	0.00075	U	0.00085	U
trans-1,2-Dichloroethene	156-60-5			1	1	mg/kg	0.085	U	0.072	U	0.001	U	0.0014	U	0.0011	U	0.0013	U
Trichloroethene	79-01-6			0.3	0.3	mg/kg	0.052		0.024	U	0.00035	U	0.0007		0.0013		0.0012	
1,2-Dichlorobenzene	95-50-1			9	9	mg/kg	0.11	U	0.096	U	0.0014	U	0.0019	U	0.0015	U	0.0017	U
1,3-Dichlorobenzene	541-73-1			3	3	mg/kg	0.11	U	0.096	U	0.0014	U	0.0019	U	0.0015	U	0.0017	U
1,4-Dichlorobenzene	106-46-7			0.7	0.7	mg/kg	0.11	U	0.096	U	0.0014	U	0.0019	U	0.0015	U	0.0017	U
Methyl tert butyl ether	1634-04-4			0.1	0.1	mg/kg	0.11		0.096	U	0.0014	U	0.0019	U	0.0015	U	0.0017	U
p/m-Xylene	179601-23-1			100	100	mg/kg	0.11	U	0.096	U	0.0014	U	0.0019	U	0.0015	U	0.0017	U
o-Xylene	95-47-6			100	100	mg/kg	0.057	U	0.048	U	0.0007	U	0.00095	U	0.00075	U	0.00085	U
Xylenes, Total	1330-20-7			100	100	mg/kg	0.057	U	0.048	U	0.0007	U	0.00095	U	0.00075	U	0.00085	U
cis-1,2-Dichloroethene	156-59-2			0.1	0.1	mg/kg	0.057	U	0.048	U	0.0007	U	0.00095	U	0.00075	U	0.00085	U
1,2-Dichloroethene, Total	540-59-0				NS	mg/kg	0.057	U	0.048	U	0.0007	U	0.00095	U	0.00075	U	0.00085	U
Dibromomethane	74-95-3			500	NS	mg/kg	0.11	U	0.096	U	0.0014	U	0.0019	U	0.0015	U	0.0017	U
1,2,3-Trichloropropane	96-18-4			100	NS	mg/kg	0.11	U	0.096	U	0.0014	U	0.0019	U	0.0015	U	0.0017	U
Styrene	100-42-5			3	3	mg/kg	0.057	U	0.048	U	0.0007	U	0.00095	U	0.00075	U	0.00085	U
Dichlorodifluoromethane	75-71-8			1000	NS	mg/kg	0.57	U	0.48	U	0.007	U	0.0095	U	0.0075	U	0.0085	U
Acetone	67-64-1			6	6	mg/kg	0.57	U	0.48	U	0.24	E	0.023		0.033		0.015	
Carbon disulfide	75-15-0			100	NS	mg/kg	0.57	U	0.48	U	0.007	U	0.0095	U	0.0075	U	0.0085	U
Methyl ethyl ketone	78-93-3			4	4	mg/kg	0.57	U	0.48	U	0.007	U	0.0095	U	0.0075	U	0.0085	U
Methyl isobutyl ketone	108-10-1			0.4	0.4	mg/kg	0.57		0.48		0.007	U	0.0095	U	0.0075	U	0.0085	U
2-Hexanone	591-78-6			100	NS	mg/kg	0.57	U	0.48	U	0.007	U	0.0095	U	0.0075	U	0.0085	U
Bromochloromethane	74-97-5				NS	mg/kg	0.11	U	0.096	U	0.0014	U	0.0019	U	0.0015	U	0.0017	U
Tetrahydrofuran	109-99-9			500	NS	mg/kg	0.23	U	0.19	U	0.0028	U	0.0038	U	0.003	U	0.0034	U
2,2-Dichloropropane	594-20-7				NS	mg/kg	0.11	U	0.096	U	0.0014	U	0.0019	U	0.0015	U	0.0017	U
1,2-Dibromoethane	106-93-4			0.1	NS	mg/kg	0.057	U	0.048	U	0.0007	U	0.00095	U	0.00075	U	0.00085	U
1,3-Dichloropropane	142-28-9			500	NS	mg/kg	0.11	U	0.096	U	0.0014	U	0.0019	U	0.0015	U	0.0017	U
1,1,1,2-Tetrachloroethane	630-20-6			0.1	0.1	mg/kg	0.028	U	0.024	U	0.00035	U	0.00048	U	0.00037	U	0.00042	U
Bromobenzene	108-86-1			100	NS	mg/kg	0.11	U	0.096	U	0.0014	U	0.0019	U	0.0015	U	0.0017	U
n-Butylbenzene	104-51-8				NS	mg/kg	0.057	U	0.048	U	0.0007	U	0.00095	U	0.00075	U	0.00085	U
sec-Butylbenzene	135-98-8				NS	mg/kg	0.057	U	0.048	U	0.0007	U	0.00095	U	0.00075	U	0.00085	U
tert-Butylbenzene	98-06-6			100	NS	mg/kg	0.11	U	0.096	U	0.0014	U	0.0019	U	0.0015	U	0.0017	U
o-Chlorotoluene	95-49-8			100	NS	mg/kg	0.11	U	0.096	U	0.0014	U	0.0019	U	0.0015	U	0.0017	U
p-Chlorotoluene	106-43-4				NS	mg/kg	0.11	U	0.096	U	0.0014	U	0.0019	U	0.0015	U	0.0017	U
1,2-Dibromo-3-chloropropane	96-12-8			10	NS	mg/kg	0.17	U	0.14	U	0.0021	U	0.0029	U	0.0022	U	0.0026	U
Hexachlorobutadiene	87-68-3			30	30	mg/kg	0.23	U	0.19	U	0.0028	U	0.0038	U	0.003	U	0.0034	U
Isopropylbenzene	98-82-8			1000	NS	mg/kg	0.057	U	0.048	U	0.0007	U	0.00095	U	0.00075	U	0.00085	U

Summary of Phase 1 Soil Sample Analytical Results
MBTA Green Line Extension Project
Washington Street
Somerville, Massachusetts

LOCATION							GLX-TPW-309-0.5		GLX-TPW-310-0.5		GLX-TPW-311-0.5		GLX-TPW-215-2.5		GLX-TPW-501-4.5		GLX-TPW-502-2.5	
SAMPLING DATE							5/23/2019		5/23/2019		5/23/2019		5/23/2019		5/23/2019		5/23/2019	
LAB SAMPLE ID							L1921946-19		L1921946-22		L1921946-25		L1921946-28		L1921946-31		L1921946-32	
SAMPLE TYPE							SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE DEPTH (ft.)																		
	CasNum	MA-LLAND	MA-ULAND	RCS-1-14	S-1	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
MCP Volatile Organics by EPA 5035																		
	p-Isopropyltoluene	99-87-6		100	NS	mg/kg	0.057	U	0.048	U	0.0007	U	0.00095	U	0.00075	U	0.00085	U
	Naphthalene	91-20-3		4	4	mg/kg	0.23	U	0.19	U	0.0028	U	0.0038	U	0.003	U	0.0034	U
	n-Propylbenzene	103-65-1		100	NS	mg/kg	0.057	U	0.048	U	0.0007	U	0.00095	U	0.00075	U	0.00085	U
	1,2,3-Trichlorobenzene	87-61-6			NS	mg/kg	0.11	U	0.096	U	0.0014	U	0.0019	U	0.0015	U	0.0017	U
	1,2,4-Trichlorobenzene	120-82-1		2	2	mg/kg	0.11	U	0.096	U	0.0014	U	0.0019	U	0.0015	U	0.0017	U
	1,3,5-Trimethylbenzene	108-67-8		10	NS	mg/kg	0.11	U	0.096	U	0.0014	U	0.0019	U	0.0015	U	0.0017	U
	1,2,4-Trimethylbenzene	95-63-6		1000	NS	mg/kg	0.11	U	0.096	U	0.0014	U	0.0019	U	0.0015	U	0.0017	U
	Diethyl ether	60-29-7		100	NS	mg/kg	0.11	U	0.096	U	0.0014	U	0.0019	U	0.0015	U	0.0017	U
	Diisopropyl Ether	108-20-3		100	NS	mg/kg	0.11	U	0.096	U	0.0014	U	0.0019	U	0.0015	U	0.0017	U
	Ethyl-Tert-Butyl-Ether	637-92-3			NS	mg/kg	0.11	U	0.096	U	0.0014	U	0.0019	U	0.0015	U	0.0017	U
	Tertiary-Amyl Methyl Ether	994-05-8			NS	mg/kg	0.11	U	0.096	U	0.0014	U	0.0019	U	0.0015	U	0.0017	U
	1,4-Dioxane	123-91-1		0.2	0.2	mg/kg	4.5	U	3.8	U	0.056	U	0.076	U	0.06	U	0.068	U
	Total VOCs		10	4		mg/kg												

Yellow shading indicates detected result is equal to or above one or more of the listed criteria.

Gray shading indicates nondetect detection limit is above one or more of the listed criteria.

Bold typeface indicates detection above metiond detection limit.

MA-LLAND: Lined Landfill Limits current as of August, 1997
MA-ULAND: UnLined Landfill Limits current as of August, 1997
RCS-1-14: MCP 2014 RCS-1 Reportable Concentrations Criteria effective April 25, 2014.
MCP 2014 S-1 Cleanup Criteria effective April 25, 2014; the lowest S-1/GW-X standard is shown.
**EPA-TCLP: EPA Toxicity Characteristic (TCLP) Regulatory Levels Criteria per 40CFR Part 261 as of September 10, 2015.

U - Not detected at the reported detection limit for the sample.
ND - Not detected.
E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

¹ - The laboratory reported two sets of VOC results due to internal standard and/or surrogate nonconformances.
The highest detected results and lowest detection limits have been tabulated. Refer to laboratory report for further detail.

² - The laboratory reported three sets of VOC results due to internal standard and/or surrogate nonconformances.
The highest detected results from the low-level analysis and detection limits from the high-level analysis have been tabulated due to significant internal standard issues with the low-level analysis. Refer to laboratory report for further detail.

Summary of Phase 1 Soil Sample Analytical Results
MBTA Green Line Extension Project
Washington Street
Somerville, Massachusetts

LOCATION							RAM PLAN											
SAMPLING DATE							GLX-TPW-214-3.5		GLX-TPW-212-3.5'		GLX-TPW-204-6'		GLX-TPW-213-4.5'		GLX-TPW-312-0.5'		GLX-TPW-203-6'	
LAB SAMPLE ID							L1921946-33		L1922181-03		L1922181-09		L1922181-12		L1922181-15		L1922181-21	
SAMPLE TYPE							SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE DEPTH (ft.)																		
	CasNum	MA-LLAND	MA-ULAND	RCS-1-14	S-1	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry																		
Solids, Total	NONE					%	91.8		89.6		91.7		90.8		91.8		94.1	
MCP Volatile Organics by EPA 5035																		
Methylene chloride	75-09-2			0.1	NS	mg/kg	0.22	U	0.0041	U	0.0048	U	0.54	U	0.21	U	0.0049	U
1,1-Dichloroethane	75-34-3			0.4	0.4	mg/kg	0.044	U	0.00082	U	0.00097	U	0.11	U	0.043	U	0.00098	U
Chloroform	67-66-3			0.2	0.2	mg/kg	0.066	U	0.0012	U	0.0014	U	0.16	U	0.064	U	0.0015	U
Carbon tetrachloride	56-23-5			5	5	mg/kg	0.044	U	0.00082	U	0.00097	U	0.11	U	0.043	U	0.00098	U
1,2-Dichloropropane	78-87-5			0.1	0.1	mg/kg	0.044	U	0.00082	U	0.00097	U	0.11	U	0.043	U	0.00098	U
Dibromochloromethane	124-48-1			0.005	0.005	mg/kg	0.044	U	0.00082	U	0.00097	U	0.11	U	0.043	U	0.00098	U
1,1,2-Trichloroethane	79-00-5			0.1	0.1	mg/kg	0.044	U	0.00082	U	0.00097	U	0.11	U	0.043	U	0.00098	U
Tetrachloroethene	127-18-4			1	1	mg/kg	7.9		0.001		0.016		14		1		0.0016	
Chlorobenzene	108-90-7			1	1	mg/kg	0.022	U	0.00041	U	0.00048	U	0.054	U	0.021	U	0.00049	U
Trichlorofluoromethane	75-69-4			1000	NS	mg/kg	0.18	U	0.0033	U	0.0039	U	0.44	U	0.17	U	0.0039	U
1,2-Dichloroethane	107-06-2			0.1	0.1	mg/kg	0.044	U	0.00082	U	0.00097	U	0.11	U	0.043	U	0.00098	U
1,1,1-Trichloroethane	71-55-6			30	30	mg/kg	0.17		0.00041	U	0.0023		0.21		0.021	U	0.00049	U
Bromodichloromethane	75-27-4			0.1	0.1	mg/kg	0.022	U	0.00041	U	0.00048	U	0.054	U	0.021	U	0.00049	U
trans-1,3-Dichloropropene	10061-02-6			0.01	NS	mg/kg	0.044	U	0.00082	U	0.00097	U	0.11	U	0.043	U	0.00098	U
cis-1,3-Dichloropropene	10061-01-5			0.01	NS	mg/kg	0.022	U	0.00041	U	0.00048	U	0.054	U	0.021	U	0.00049	U
1,3-Dichloropropene, Total	542-75-6			0.01	0.01	mg/kg	0.022	U	0.00041	U	0.00048	U	0.054	U	0.021	U	0.00049	U
1,1-Dichloropropene	563-58-6				NS	mg/kg	0.022	U	0.00041	U	0.00048	U	0.054	U	0.021	U	0.00049	U
Bromoform	75-25-2			0.1	0.1	mg/kg	0.18	U	0.0033	U	0.0039	U	0.44	U	0.17	U	0.0039	U
1,1,2,2-Tetrachloroethane	79-34-5			0.005	0.005	mg/kg	0.022	U	0.00041	U	0.00048	U	0.054	U	0.021	U	0.00049	U
Benzene	71-43-2			2	2	mg/kg	0.022	U	0.0006		0.00048	U	0.054	U	0.021	U	0.00049	U
Toluene	108-88-3			30	30	mg/kg	0.044	U	0.00082	U	0.0015		0.11	U	0.043	U	0.00098	U
Ethylbenzene	100-41-4			40	40	mg/kg	0.044	U	0.00082	U	0.00097	U	0.11	U	0.043	U	0.00098	U
Chloromethane	74-87-3			100	NS	mg/kg	0.18	U	0.0033	U	0.0039	U	0.44	U	0.17	U	0.0039	U
Bromomethane	74-83-9			0.5	0.5	mg/kg	0.089	U	0.0016	U	0.0019	U	0.22	U	0.086	U	0.002	U
Vinyl chloride	75-01-4			0.7	0.7	mg/kg	0.044	U	0.00082	U	0.00097	U	0.11	U	0.043	U	0.00098	U
Chloroethane	75-00-3			100	NS	mg/kg	0.089	U	0.0016	U	0.0019	U	0.22	U	0.086	U	0.002	U
1,1-Dichloroethene	75-35-4			3	3	mg/kg	0.044	U	0.00082	U	0.00097	U	0.11	U	0.043	U	0.00098	U
trans-1,2-Dichloroethene	156-60-5			1	1	mg/kg	0.066	U	0.0012	U	0.0014	U	0.16	U	0.064	U	0.0015	U
Trichloroethene	79-01-6			0.3	0.3	mg/kg	0.16		0.0012		0.0014		0.58		0.021	U	0.00049	U
1,2-Dichlorobenzene	95-50-1			9	9	mg/kg	0.089	U	0.0016	U	0.0019	U	0.22	U	0.086	U	0.002	U
1,3-Dichlorobenzene	541-73-1			3	3	mg/kg	0.089	U	0.0016	U	0.0019	U	0.22	U	0.086	U	0.002	U
1,4-Dichlorobenzene	106-46-7			0.7	0.7	mg/kg	0.089	U	0.0016	U	0.0019	U	0.22	U	0.086	U	0.002	U
Methyl tert butyl ether	1634-04-4			0.1	0.1	mg/kg	0.089	U	0.0016	U	0.0019	U	0.22	U	0.086	U	0.002	U
p/m-Xylene	179601-23-1			100	100	mg/kg	0.089	U	0.0016	U	0.0019	U	0.22	U	0.086	U	0.002	U
o-Xylene	95-47-6			100	100	mg/kg	0.044	U	0.00082	U	0.00097	U	0.11	U	0.043	U	0.00098	U
Xylenes, Total	1330-20-7			100	100	mg/kg	0.044	U	0.00082	U	0.00097	U	0.11	U	0.043	U	0.00098	U
cis-1,2-Dichloroethene	156-59-2			0.1	0.1	mg/kg	0.044	U	0.0034		0.00097	U	0.11	U	0.043	U	0.00098	U
1,2-Dichloroethene, Total	540-59-0				NS	mg/kg	0.044	U	0.0034		0.00097	U	0.11	U	0.043	U	0.00098	U
Dibromomethane	74-95-3			500	NS	mg/kg	0.089	U	0.0016	U	0.0019	U	0.22	U	0.086	U	0.002	U
1,2,3-Trichloropropane	96-18-4			100	NS	mg/kg	0.089	U	0.0016	U	0.0019	U	0.22	U	0.086	U	0.002	U
Styrene	100-42-5			3	3	mg/kg	0.044	U	0.00082	U	0.00097	U	0.11	U	0.043	U	0.00098	U
Dichlorodifluoromethane	75-71-8			1000	NS	mg/kg	0.44	U	0.0082	U	0.0097	U	1.1	U	0.43	U	0.0098	U
Acetone	67-64-1			6	6	mg/kg	0.44	U	0.028		0.039		1.1	U	0.43	U	0.027	
Carbon disulfide	75-15-0			100	NS	mg/kg	0.44	U	0.0082	U	0.0097	U	1.1	U	0.43	U	0.0098	U
Methyl ethyl ketone	78-93-3			4	4	mg/kg	0.44	U	0.0082	U	0.0097	U	1.1	U	0.43	U	0.0098	U
Methyl isobutyl ketone	108-10-1			0.4	0.4	mg/kg	0.44	U	0.0082	U	0.0097	U	1.1	U	0.43	U	0.0098	U
2-Hexanone	591-78-6			100	NS	mg/kg	0.44	U	0.0082	U	0.0097	U	1.1	U	0.43	U	0.0098	U
Bromochloromethane	74-97-5				NS	mg/kg	0.089	U	0.0016	U	0.0019	U	0.22	U	0.086	U	0.002	U
Tetrahydrofuran	109-99-9			500	NS	mg/kg	0.18	U	0.0033	U	0.0039	U	0.44	U	0.17	U	0.0039	U
2,2-Dichloropropane	594-20-7				NS	mg/kg	0.089	U	0.0016	U	0.0019	U	0.22	U	0.086	U	0.002	U
1,2-Dibromoethane	106-93-4			0.1	NS	mg/kg	0.044	U	0.00082	U	0.00097	U	0.11	U	0.043	U	0.00098	U
1,3-Dichloropropane	142-28-9			500	NS	mg/kg	0.089	U	0.0016	U	0.0019	U	0.22	U	0.086	U	0.002	U
1,1,1,2-Tetrachloroethane	630-20-6			0.1	0.1	mg/kg	0.022	U	0.00041	U	0.00048	U	0.054	U	0.021	U	0.00049	U
Bromobenzene	108-86-1			100	NS	mg/kg	0.089	U	0.0016	U	0.0019	U	0.22	U	0.086	U	0.002	U
n-Butylbenzene	104-51-8				NS	mg/kg	0.044	U	0.00082	U	0.00097	U	0.11	U	0.043	U	0.00098	U
sec-Butylbenzene	135-98-8				NS	mg/kg	0.044	U	0.00082	U	0.00097	U	0.11	U	0.043	U	0.00098	U
tert-Butylbenzene	98-06-6			100	NS	mg/kg	0.089	U	0.0016	U	0.0019	U	0.22	U	0.086	U	0.002	U
o-Chlorotoluene	95-49-8			100	NS	mg/kg	0.089	U	0.0016	U	0.0019	U	0.22	U	0.086	U	0.002	U
p-Chlorotoluene	106-43-4				NS	mg/kg	0.089	U	0.0016	U	0.0019	U	0.22	U	0.086	U	0.002	U
1,2-Dibromo-3-chloropropane	96-12-8			10	NS	mg/kg	0.13	U	0.0025	U	0.0029	U	0.33	U	0.13	U	0.0029	U
Hexachlorobutadiene	87-68-3			30	30	mg/kg	0.18	U	0.0033	U	0.0039	U	0.44	U	0.17	U	0.0039	U
Isopropylbenzene	98-82-8			1000	NS	mg/kg	0.044	U	0.00082	U	0.00097	U	0.11	U	0.043	U	0.00098	U

Summary of Phase 1 Soil Sample Analytical Results
MBTA Green Line Extension Project
Washington Street
Somerville, Massachusetts

								RAM PLAN											
LOCATION								GLX-TPW-214-3.5		GLX-TPW-212-3.5'		GLX-TPW-204-6'		GLX-TPW-213-4.5'		GLX-TPW-312-0.5'		GLX-TPW-203-6'	
SAMPLING DATE								5/23/2019		5/24/2019		5/24/2019		5/24/2019		5/24/2019		5/24/2019	
LAB SAMPLE ID								L19221946-33		L1922181-03		L1922181-09		L1922181-12		L1922181-15		L1922181-21	
SAMPLE TYPE								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE DEPTH (ft.)																			
		CasNum	MA-LLAND	MA-ULAND	RCS-1-14	S-1	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
MCP Volatile Organics by EPA 5035																			
	p-Isopropyltoluene	99-87-6			100	NS	mg/kg	0.044	U	0.00082	U	0.00097	U	0.11	U	0.043	U	0.00098	U
	Naphthalene	91-20-3			4	4	mg/kg	0.18	U	0.0033	U	0.0039	U	0.44	U	0.17	U	0.0039	U
	n-Propylbenzene	103-65-1			100	NS	mg/kg	0.044	U	0.00082	U	0.00097	U	0.11	U	0.043	U	0.00098	U
	1,2,3-Trichlorobenzene	87-61-6				NS	mg/kg	0.089	U	0.0016	U	0.0019	U	0.22	U	0.086	U	0.002	U
	1,2,4-Trichlorobenzene	120-82-1			2	2	mg/kg	0.089	U	0.0016	U	0.0019	U	0.22	U	0.086	U	0.002	U
	1,3,5-Trimethylbenzene	108-67-8			10	NS	mg/kg	0.089	U	0.0016	U	0.0019	U	0.22	U	0.086	U	0.002	U
	1,2,4-Trimethylbenzene	95-63-6			1000	NS	mg/kg	0.089	U	0.0016	U	0.0019	U	0.22	U	0.086	U	0.002	U
	Diethyl ether	60-29-7			100	NS	mg/kg	0.089	U	0.0016	U	0.0019	U	0.22	U	0.086	U	0.002	U
	Diisopropyl Ether	108-20-3			100	NS	mg/kg	0.089	U	0.0016	U	0.0019	U	0.22	U	0.086	U	0.002	U
	Ethyl-Tert-Butyl-Ether	637-92-3				NS	mg/kg	0.089	U	0.0016	U	0.0019	U	0.22	U	0.086	U	0.002	U
	Tertiary-Amyl Methyl Ether	994-05-8				NS	mg/kg	0.089	U	0.0016	U	0.0019	U	0.22	U	0.086	U	0.002	U
	1,4-Dioxane	123-91-1			0.2	0.2	mg/kg	3.5	U	0.066	U	0.078	U	8.7	U	3.4	U	0.078	U
	Total VOCs		10	4			mg/kg												

Yellow shading indicates detected result is equal to or above one or more of the listed criteria.

Gray shading indicates nondetect detection limit is above one or more of the listed criteria.

Bold typeface indicates detection above metiond detection limit.

MA-LLAND: Lined Landfill Limits current as of August, 1997
MA-ULAND: UnLined Landfill Limits current as of August, 1997
RCS-1-14: MCP 2014 RCS-1 Reportable Concentrations Criteria effective April 25, 2014.
MCP 2014 S-1 Cleanup Criteria effective April 25, 2014; the lowest S-1/GW-X standard is shown.
**EPA-TCLP: EPA Toxicity Characteristic (TCLP) Regulatory Levels Criteria per 40CFR Part 261 as of September 10, 2015.

U - Not detected at the reported detection limit for the sample.
ND - Not detected.
E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

¹ - The laboratory reported two sets of VOC results due to internal standard and/or surrogate nonconformances.
The highest detected results and lowest detection limits have been tabulated. Refer to laboratory report for further detail.

² - The laboratory reported three sets of VOC results due to internal standard and/or surrogate nonconformances.
The highest detected results from the low-level analysis and detection limits from the high-level analysis have been tabulated due to significant internal standard issues with the low-level analysis. Refer to laboratory report for further detail.

Summary of Phase 1 Soil Sample Analytical Results
MBTA Green Line Extension Project
Washington Street
Somerville, Massachusetts

LOCATION							GLX-TPW-305-0.5'		GLX-TPW-205-8'		GLX-TPW-201-5		GLX-TPW-204-4.5'		GLX-TPW-203-4.5'		GLX-TPW-205-3.5'	
SAMPLING DATE							5/24/2019		5/24/2019		5/23/2019		5/24/2019		5/24/2019		5/24/2019	
LAB SAMPLE ID							L1922181-29		L1922181-30		L1922758-01		L1922773-01		L1922773-02		L1922773-03	
SAMPLE TYPE							SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE DEPTH (ft.)																		
	CasNum	MA-LLAND	MA-ULAND	RCS-1-14	S-1	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry																		
Solids, Total	NONE					%	95.8		95		80.2		93.5		92.2		95.8	
MCP Volatile Organics by EPA 5035																		
Methylene chloride	75-09-2			0.1	NS	mg/kg	0.0045	U	0.0044	U	0.0032	U	0.0045	U	0.0042	U	0.0035	U
1,1-Dichloroethane	75-34-3			0.4	0.4	mg/kg	0.0009	U	0.00089	U	0.00064	U	0.00091	U	0.00083	U	0.00071	U
Chloroform	67-66-3			0.2	0.2	mg/kg	0.0013	U	0.0013	U	0.00096	U	0.0014	U	0.0012	U	0.0011	U
Carbon tetrachloride	56-23-5			5	5	mg/kg	0.0009	U	0.00089	U	0.00064	U	0.00091	U	0.00083	U	0.00071	U
1,2-Dichloropropane	78-87-5			0.1	0.1	mg/kg	0.0009	U	0.00089	U	0.00064	U	0.00091	U	0.00083	U	0.00071	U
Dibromochloromethane	124-48-1			0.005	0.005	mg/kg	0.0009	U	0.00089	U	0.00064	U	0.00091	U	0.00083	U	0.00071	U
1,1,2-Trichloroethane	79-00-5			0.1	0.1	mg/kg	0.0009	U	0.00089	U	0.00064	U	0.00091	U	0.00083	U	0.00071	U
Tetrachloroethene	127-18-4			1	1	mg/kg	0.00045	U	0.006		0.00032	U	0.0094		0.00042		0.0057	
Chlorobenzene	108-90-7			1	1	mg/kg	0.00045	U	0.00044	U	0.00032	U	0.00045	U	0.00042	U	0.00035	U
Trichlorofluoromethane	75-69-4			1000	NS	mg/kg	0.0036	U	0.0036	U	0.0026	U	0.0036	U	0.0033	U	0.0028	U
1,2-Dichloroethane	107-06-2			0.1	0.1	mg/kg	0.0009	U	0.00089	U	0.00064	U	0.00091	U	0.00083	U	0.00071	U
1,1,1-Trichloroethane	71-55-6			30	30	mg/kg	0.00045	U	0.00044	U	0.00032	U	0.0018		0.00042	U	0.00035	U
Bromodichloromethane	75-27-4			0.1	0.1	mg/kg	0.00045	U	0.00044	U	0.00032	U	0.00045	U	0.00042	U	0.00035	U
trans-1,3-Dichloropropene	10061-02-6			0.01	NS	mg/kg	0.0009	U	0.00089	U	0.00064	U	0.00091	U	0.00083	U	0.00071	U
cis-1,3-Dichloropropene	10061-01-5			0.01	NS	mg/kg	0.00045	U	0.00044	U	0.00032	U	0.00045	U	0.00042	U	0.00035	U
1,3-Dichloropropene, Total	542-75-6			0.01	0.01	mg/kg	0.00045	U	0.00044	U	0.00032	U	0.00045	U	0.00042	U	0.00035	U
1,1-Dichloropropene	563-58-6				NS	mg/kg	0.00045	U	0.00044	U	0.00032	U	0.00045	U	0.00042	U	0.00035	U
Bromoform	75-25-2			0.1	0.1	mg/kg	0.0036	U	0.0036	U	0.0026	U	0.0036	U	0.0033	U	0.0028	U
1,1,2,2-Tetrachloroethane	79-34-5			0.005	0.005	mg/kg	0.00045	U	0.00044	U	0.00032	U	0.00045	U	0.00042	U	0.00035	U
Benzene	71-43-2			2	2	mg/kg	0.00045	U	0.00044	U	0.00032	U	0.00045	U	0.00042	U	0.00035	U
Toluene	108-88-3			30	30	mg/kg	0.00099		0.0014		0.00064	U	0.00091	U	0.00083	U	0.0011	
Ethylbenzene	100-41-4			40	40	mg/kg	0.0009	U	0.00089	U	0.00064	U	0.00091	U	0.00083	U	0.00071	U
Chloromethane	74-87-3			100	NS	mg/kg	0.0036	U	0.0036	U	0.0026	U	0.0036	U	0.0033	U	0.0028	U
Bromomethane	74-83-9			0.5	0.5	mg/kg	0.0018	U	0.0018	U	0.0013	U	0.0018	U	0.0017	U	0.0014	U
Vinyl chloride	75-01-4			0.7	0.7	mg/kg	0.0009	U	0.00089	U	0.00064	U	0.00091	U	0.00083	U	0.00071	U
Chloroethane	75-00-3			100	NS	mg/kg	0.0018	U	0.0018	U	0.0013	U	0.0018	U	0.0017	U	0.0014	U
1,1-Dichloroethene	75-35-4			3	3	mg/kg	0.0009	U	0.00089	U	0.00064	U	0.00091	U	0.00083	U	0.00071	U
trans-1,2-Dichloroethene	156-60-5			1	1	mg/kg	0.0013	U	0.0013	U	0.00096	U	0.0014	U	0.0012	U	0.0011	U
Trichloroethene	79-01-6			0.3	0.3	mg/kg	0.00045	U	0.00057		0.00032	U	0.00098		0.00042	U	0.00056	
1,2-Dichlorobenzene	95-50-1			9	9	mg/kg	0.0018	U	0.0018	U	0.0013	U	0.0018	U	0.0017	U	0.0014	U
1,3-Dichlorobenzene	541-73-1			3	3	mg/kg	0.0018	U	0.0018	U	0.0013	U	0.0018	U	0.0017	U	0.0014	U
1,4-Dichlorobenzene	106-46-7			0.7	0.7	mg/kg	0.0018	U	0.0018	U	0.0013	U	0.0018	U	0.0017	U	0.0014	U
Methyl tert butyl ether	1634-04-4			0.1	0.1	mg/kg	0.0018	U	0.0018	U	0.0013	U	0.0018	U	0.0017	U	0.0014	U
p/m-Xylene	179601-23-1			100	100	mg/kg	0.0018	U	0.0018	U	0.0013	U	0.0018	U	0.0017	U	0.0014	U
o-Xylene	95-47-6			100	100	mg/kg	0.0009	U	0.00089	U	0.00064	U	0.00091	U	0.00083	U	0.00071	U
Xylenes, Total	1330-20-7			100	100	mg/kg	0.0009	U	0.00089	U	0.00064	U	0.00091	U	0.00083	U	0.00071	U
cis-1,2-Dichloroethene	156-59-2			0.1	0.1	mg/kg	0.0009	U	0.00089	U	0.00064	U	0.00091	U	0.00083	U	0.00071	U
1,2-Dichloroethene, Total	540-59-0				NS	mg/kg	0.0009	U	0.00089	U	0.00064	U	0.00091	U	0.00083	U	0.00071	U
Dibromomethane	74-95-3			500	NS	mg/kg	0.0018	U	0.0018	U	0.0013	U	0.0018	U	0.0017	U	0.0014	U
1,2,3-Trichloropropane	96-18-4			100	NS	mg/kg	0.0018	U	0.0018	U	0.0013	U	0.0018	U	0.0017	U	0.0014	U
Styrene	100-42-5			3	3	mg/kg	0.0009	U	0.00089	U	0.00064	U	0.00091	U	0.00083	U	0.00071	U
Dichlorodifluoromethane	75-71-8			1000	NS	mg/kg	0.009	U	0.0089	U	0.0064	U	0.0091	U	0.0083	U	0.0071	U
Acetone	67-64-1			6	6	mg/kg	0.33	E	0.049		0.032		0.017		0.017		0.15	
Carbon disulfide	75-15-0			100	NS	mg/kg	0.009	U	0.0089	U	0.0064	U	0.0091	U	0.0083	U	0.0071	U
Methyl ethyl ketone	78-93-3			4	4	mg/kg	0.016		0.0089	U	0.0064	U	0.0091	U	0.0083	U	0.0071	U
Methyl isobutyl ketone	108-10-1			0.4	0.4	mg/kg	0.009	U	0.0089	U	0.0064	U	0.0091	U	0.0083	U	0.0071	U
2-Hexanone	591-78-6			100	NS	mg/kg	0.009	U	0.0089	U	0.0064	U	0.0091	U	0.0083	U	0.0071	U
Bromochloromethane	74-97-5				NS	mg/kg	0.0018	U	0.0018	U	0.0013	U	0.0018	U	0.0017	U	0.0014	U
Tetrahydrofuran	109-99-9			500	NS	mg/kg	0.42	E	0.0036	U	0.0026	U	0.0036	U	0.0033	U	0.0028	U
2,2-Dichloropropane	594-20-7				NS	mg/kg	0.0018	U	0.0018	U	0.0013	U	0.0018	U	0.0017	U	0.0014	U
1,2-Dibromoethane	106-93-4			0.1	NS	mg/kg	0.0009	U	0.00089	U	0.00064	U	0.00091	U	0.00083	U	0.00071	U
1,3-Dichloropropane	142-28-9			500	NS	mg/kg	0.0018	U	0.0018	U	0.0013	U	0.0018	U	0.0017	U	0.0014	U
1,1,1,2-Tetrachloroethane	630-20-6			0.1	0.1	mg/kg	0.00045	U	0.00044	U	0.00032	U	0.00045	U	0.00042	U	0.00035	U
Bromobenzene	108-86-1			100	NS	mg/kg	0.0018	U	0.0018	U	0.0013	U	0.0018	U	0.0017	U	0.0014	U
n-Butylbenzene	104-51-8				NS	mg/kg	0.0009	U	0.00089	U	0.00064	U	0.00091	U	0.00083	U	0.00071	U
sec-Butylbenzene	135-98-8				NS	mg/kg	0.0009	U	0.00089	U	0.00064	U	0.00091	U	0.00083	U	0.00071	U
tert-Butylbenzene	98-06-6			100	NS	mg/kg	0.0018	U	0.0018	U	0.0013	U	0.0018	U	0.0017	U	0.0014	U
o-Chlorotoluene	95-49-8			100	NS	mg/kg	0.0018	U	0.0018	U	0.0013	U	0.0018	U	0.0017	U	0.0014	U
p-Chlorotoluene	106-43-4				NS	mg/kg	0.0018	U	0.0018	U	0.0013	U	0.0018	U	0.0017	U	0.0014	U
1,2-Dibromo-3-chloropropane	96-12-8			10	NS	mg/kg	0.0027	U	0.0027	U	0.0019	U	0.0027	U	0.0025	U	0.0021	U
Hexachlorobutadiene	87-68-3			30	30	mg/kg	0.0036	U	0.0036	U	0.0026	U	0.0036	U	0.0033	U	0.0028	U
Isopropylbenzene	98-82-8			1000	NS	mg/kg	0.0009	U	0.00089	U	0.00064	U	0.00091	U	0.00083	U	0.00071	U

Summary of Phase 1 Soil Sample Analytical Results
MBTA Green Line Extension Project
Washington Street
Somerville, Massachusetts

LOCATION								GLX-TPW-305-0.5'		GLX-TPW-205-8'		GLX-TPW-201-5		GLX-TPW-204-4.5'		GLX-TPW-203-4.5'		GLX-TPW-205-3.5'	
SAMPLING DATE								5/24/2019		5/24/2019		5/23/2019		5/24/2019		5/24/2019		5/24/2019	
LAB SAMPLE ID								L1922181-29		L1922181-30		L1922758-01		L1922773-01		L1922773-02		L1922773-03	
SAMPLE TYPE								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE DEPTH (ft.)																			
		CasNum	MA-LLAND	MA-ULAND	RCS-1-14	S-1	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
MCP Volatile Organics by EPA 5035																			
	p-Isopropyltoluene	99-87-6			100	NS	mg/kg	0.0009	U	0.00089	U	0.00064	U	0.00091	U	0.00083	U	0.00071	U
	Naphthalene	91-20-3			4	4	mg/kg	0.0036	U	0.0036	U	0.0026	U	0.0036	U	0.0033	U	0.0028	U
	n-Propylbenzene	103-65-1			100	NS	mg/kg	0.0009	U	0.00089	U	0.00064	U	0.00091	U	0.00083	U	0.00071	U
	1,2,3-Trichlorobenzene	87-61-6				NS	mg/kg	0.0018	U	0.0018	U	0.0013	U	0.0018	U	0.0017	U	0.0014	U
	1,2,4-Trichlorobenzene	120-82-1			2	2	mg/kg	0.0018	U	0.0018	U	0.0013	U	0.0018	U	0.0017	U	0.0014	U
	1,3,5-Trimethylbenzene	108-67-8			10	NS	mg/kg	0.0018	U	0.0018	U	0.0013	U	0.0018	U	0.0017	U	0.0014	U
	1,2,4-Trimethylbenzene	95-63-6			1000	NS	mg/kg	0.0018	U	0.0018	U	0.0013	U	0.0018	U	0.0017	U	0.0014	U
	Diethyl ether	60-29-7			100	NS	mg/kg	0.0018	U	0.0018	U	0.0013	U	0.0018	U	0.0017	U	0.0014	U
	Diisopropyl Ether	108-20-3			100	NS	mg/kg	0.0018	U	0.0018	U	0.0013	U	0.0018	U	0.0017	U	0.0014	U
	Ethyl-Tert-Butyl-Ether	637-92-3				NS	mg/kg	0.0018	U	0.0018	U	0.0013	U	0.0018	U	0.0017	U	0.0014	U
	Tertiary-Amyl Methyl Ether	994-05-8				NS	mg/kg	0.0018	U	0.0018	U	0.0013	U	0.0018	U	0.0017	U	0.0014	U
	1,4-Dioxane	123-91-1			0.2	0.2	mg/kg	0.072	U	0.071	U	0.051	U	0.072	U	0.066	U	0.057	U
	Total VOCs		10	4			mg/kg												

Yellow shading indicates detected result is equal to or above one or more of the listed criteria.

Gray shading indicates nondetect detection limit is above one or more of the listed criteria.

Bold typeface indicates detection above metiond detection limit.

MA-LLAND: Lined Landfill Limits current as of August, 1997
MA-ULAND: UnLined Landfill Limits current as of August, 1997
RCS-1-14: MCP 2014 RCS-1 Reportable Concentrations Criteria effective April 25, 2014.
MCP 2014 S-1 Cleanup Criteria effective April 25, 2014; the lowest S-1/GW-X standard is shown.
**EPA-TCLP: EPA Toxicity Characteristic (TCLP) Regulatory Levels Criteria per 40CFR Part 261 as of September 10, 2015.

U - Not detected at the reported detection limit for the sample.
ND - Not detected.
E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

¹ - The laboratory reported two sets of VOC results due to internal standard and/or surrogate nonconformances.
The highest detected results and lowest detection limits have been tabulated. Refer to laboratory report for further detail.

² - The laboratory reported three sets of VOC results due to internal standard and/or surrogate nonconformances.
The highest detected results from the low-level analysis and detection limits from the high-level analysis have been tabulated due to significant internal standard issues with the low-level analysis. Refer to laboratory report for further detail.

Summary of Phase 1 Soil Sample Analytical Results
MBTA Green Line Extension Project
Washington Street
Somerville, Massachusetts

LOCATION							GLX-TPW-3081-1.5'		GLX-TPW-3091-1.5'		GLX-TPW-3121-1.5'		GLX-TPW-2131-4.5'		GLX-TPW-2132-4.5'		GLX-TPW-2141-3.5'	
SAMPLING DATE							5/31/2019		5/31/2019		5/31/2019		5/31/2019		5/31/2019		5/31/2019	
LAB SAMPLE ID							L1923201-03		L1923201-06		L1923201-09		L1923201-12		L1923201-15		L1923201-18	
SAMPLE TYPE							SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE DEPTH (ft.)																		
	CasNum	MA-LLAND	MA-ULAND	RCS-1-14	S-1	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry																		
Solids, Total	NONE					%	83		89.2		92		93.2		92.6		93.5	
MCP Volatile Organics by EPA 5035																		
Methylene chloride	75-09-2			0.1	NS	mg/kg	0.0068	U	0.0044	U	0.0047	U	0.0048	U	0.0038	U	0.0047	U
1,1-Dichloroethane	75-34-3			0.4	0.4	mg/kg	0.0014	U	0.00089	U	0.00094	U	0.00096	U	0.00076	U	0.00093	U
Chloroform	67-66-3			0.2	0.2	mg/kg	0.002	U	0.0013	U	0.0014	U	0.0014	U	0.0011	U	0.0014	U
Carbon tetrachloride	56-23-5			5	5	mg/kg	0.0014	U	0.00089	U	0.00094	U	0.00096	U	0.00076	U	0.00093	U
1,2-Dichloropropane	78-87-5			0.1	0.1	mg/kg	0.0014	U	0.00089	U	0.00094	U	0.00096	U	0.00076	U	0.00093	U
Dibromochloromethane	124-48-1			0.005	0.005	mg/kg	0.0014	U	0.00089	U	0.00094	U	0.00096	U	0.00076	U	0.00093	U
1,1,2-Trichloroethane	79-00-5			0.1	0.1	mg/kg	0.0014	U	0.00089	U	0.00094	U	0.00096	U	0.00076	U	0.00093	U
Tetrachloroethene	127-18-4			1	1	mg/kg	0.00068	U	0.003		0.0014		0.00071		0.0033		0.098	
Chlorobenzene	108-90-7			1	1	mg/kg	0.00068	U	0.00044	U	0.00047	U	0.00048	U	0.00038	U	0.00047	U
Trichlorofluoromethane	75-69-4			1000	NS	mg/kg	0.0054	U	0.0036	U	0.0038	U	0.0038	U	0.003	U	0.0037	U
1,2-Dichloroethane	107-06-2			0.1	0.1	mg/kg	0.0014	U	0.00089	U	0.00094	U	0.00096	U	0.00076	U	0.00093	U
1,1,1-Trichloroethane	71-55-6			30	30	mg/kg	0.00068	U	0.00057		0.00047		0.00048		0.00038		0.0033	
Bromodichloromethane	75-27-4			0.1	0.1	mg/kg	0.00068	U	0.00044	U	0.00047	U	0.00048	U	0.00038	U	0.00047	U
trans-1,3-Dichloropropene	10061-02-6			0.01	NS	mg/kg	0.0014	U	0.00089	U	0.00094	U	0.00096	U	0.00076	U	0.00093	U
cis-1,3-Dichloropropene	10061-01-5			0.01	NS	mg/kg	0.00068	U	0.00044	U	0.00047	U	0.00048	U	0.00038	U	0.00047	U
1,3-Dichloropropene, Total	542-75-6			0.01	0.01	mg/kg	0.00068	U	0.00044	U	0.00047	U	0.00048	U	0.00038	U	0.00047	U
1,1-Dichloropropene	563-58-6			NS	NS	mg/kg	0.00068	U	0.00044	U	0.00047	U	0.00048	U	0.00038	U	0.00047	U
Bromoform	75-25-2			0.1	0.1	mg/kg	0.0054	U	0.0036	U	0.0038	U	0.0038	U	0.003	U	0.0037	U
1,1,2,2-Tetrachloroethane	79-34-5			0.005	0.005	mg/kg	0.00068	U	0.00044	U	0.00047	U	0.00048	U	0.00038	U	0.00047	U
Benzene	71-43-2			2	2	mg/kg	0.00068	U	0.00044	U	0.00047	U	0.00048	U	0.00038	U	0.00047	U
Toluene	108-88-3			30	30	mg/kg	0.0014	U	0.00089	U	0.00094	U	0.0016		0.00076		0.00093	
Ethylbenzene	100-41-4			40	40	mg/kg	0.0014	U	0.00089	U	0.00094	U	0.00096	U	0.00076	U	0.00093	U
Chloromethane	74-87-3			100	NS	mg/kg	0.0054	U	0.0036	U	0.0038	U	0.0038	U	0.003	U	0.0037	U
Bromomethane	74-83-9			0.5	0.5	mg/kg	0.0027	U	0.0018	U	0.0019	U	0.0019	U	0.0015	U	0.0019	U
Vinyl chloride	75-01-4			0.7	0.7	mg/kg	0.0014	U	0.00089	U	0.00094	U	0.00096	U	0.00076	U	0.00093	U
Chloroethane	75-00-3			100	NS	mg/kg	0.0027	U	0.0018	U	0.0019	U	0.0019	U	0.0015	U	0.0019	U
1,1-Dichloroethene	75-35-4			3	3	mg/kg	0.0014	U	0.00089	U	0.00094	U	0.00096	U	0.00076	U	0.00093	U
trans-1,2-Dichloroethene	156-60-5			1	1	mg/kg	0.002	U	0.0013	U	0.0014	U	0.0014	U	0.0011	U	0.0014	U
Trichloroethene	79-01-6			0.3	0.3	mg/kg	0.00068	U	0.00044	U	0.00047	U	0.00048	U	0.00038	U	0.0089	
1,2-Dichlorobenzene	95-50-1			9	9	mg/kg	0.0027	U	0.0018	U	0.0019	U	0.0019	U	0.0015	U	0.0019	U
1,3-Dichlorobenzene	541-73-1			3	3	mg/kg	0.0027	U	0.0018	U	0.0019	U	0.0019	U	0.0015	U	0.0019	U
1,4-Dichlorobenzene	106-46-7			0.7	0.7	mg/kg	0.0027	U	0.0018	U	0.0019	U	0.0019	U	0.0015	U	0.0019	U
Methyl tert butyl ether	1634-04-4			0.1	0.1	mg/kg	0.0027	U	0.0018	U	0.0019	U	0.0019	U	0.0015	U	0.0019	U
p/m-Xylene	179601-23-1			100	100	mg/kg	0.0027	U	0.0018	U	0.0019	U	0.0019	U	0.0015	U	0.0019	U
o-Xylene	95-47-6			100	100	mg/kg	0.0014	U	0.00089	U	0.00094	U	0.00096	U	0.00076	U	0.00093	U
Xylenes, Total	1330-20-7			100	100	mg/kg	0.0014	U	0.00089	U	0.00094	U	0.00096	U	0.00076	U	0.00093	U
cis-1,2-Dichloroethene	156-59-2			0.1	0.1	mg/kg	0.0014	U	0.00089	U	0.00094	U	0.00096	U	0.00076	U	0.00093	U
1,2-Dichloroethene, Total	540-59-0			NS	NS	mg/kg	0.0014	U	0.00089	U	0.00094	U	0.00096	U	0.00076	U	0.00093	U
Dibromomethane	74-95-3			500	NS	mg/kg	0.0027	U	0.0018	U	0.0019	U	0.0019	U	0.0015	U	0.0019	U
1,2,3-Trichloropropane	96-18-4			100	NS	mg/kg	0.0027	U	0.0018	U	0.0019	U	0.0019	U	0.0015	U	0.0019	U
Styrene	100-42-5			3	3	mg/kg	0.0014	U	0.00089	U	0.00094	U	0.00096	U	0.00076	U	0.00093	U
Dichlorodifluoromethane	75-71-8			1000	NS	mg/kg	0.014	U	0.0089	U	0.0094	U	0.0096	U	0.0076	U	0.0093	U
Acetone	67-64-1			6	6	mg/kg	0.066		0.18		0.27		0.064		0.21		0.16	
Carbon disulfide	75-15-0			100	NS	mg/kg	0.014	U	0.0089	U	0.0094	U	0.0096	U	0.0076	U	0.0093	U
Methyl ethyl ketone	78-93-3			4	4	mg/kg	0.014	U	0.0089	U	0.0094	U	0.0096	U	0.0076	U	0.0093	U
Methyl isobutyl ketone	108-10-1			0.4	0.4	mg/kg	0.014	U	0.0089	U	0.0094	U	0.0096	U	0.0076	U	0.0093	U
2-Hexanone	591-78-6			100	NS	mg/kg	0.014	U	0.0089	U	0.0094	U	0.0096	U	0.0076	U	0.0093	U
Bromochloromethane	74-97-5			NS	NS	mg/kg	0.0027	U	0.0018	U	0.0019	U	0.0019	U	0.0015	U	0.0019	U
Tetrahydrofuran	109-99-9			500	NS	mg/kg	0.0054	U	0.0036	U	0.0038	U	0.0038	U	0.003	U	0.0037	U
2,2-Dichloropropane	594-20-7			NS	NS	mg/kg	0.0027	U	0.0018	U	0.0019	U	0.0019	U	0.0015	U	0.0019	U
1,2-Dibromoethane	106-93-4			0.1	NS	mg/kg	0.0014	U	0.00089	U	0.00094	U	0.00096	U	0.00076	U	0.00093	U
1,3-Dichloropropane	142-28-9			500	NS	mg/kg	0.0027	U	0.0018	U	0.0019	U	0.0019	U	0.0015	U	0.0019	U
1,1,1,2-Tetrachloroethane	630-20-6			0.1	0.1	mg/kg	0.00068	U	0.00044	U	0.00047	U	0.00048	U	0.00038	U	0.00047	U
Bromobenzene	108-86-1			100	NS	mg/kg	0.0027	U	0.0018	U	0.0019	U	0.0019	U	0.0015	U	0.0019	U
n-Butylbenzene	104-51-8			NS	NS	mg/kg	0.0014	U	0.00089	U	0.00094	U	0.00096	U	0.00076	U	0.00093	U
sec-Butylbenzene	135-98-8			NS	NS	mg/kg	0.0014	U	0.00089	U	0.00094	U	0.00096	U	0.00076	U	0.00093	U
tert-Butylbenzene	98-06-6			100	NS	mg/kg	0.0027	U	0.0018	U	0.0019	U	0.0019	U	0.0015	U	0.0019	U
o-Chlorotoluene	95-49-8			100	NS	mg/kg	0.0027	U	0.0018	U	0.0019	U	0.0019	U	0.0015	U	0.0019	U
p-Chlorotoluene	106-43-4			NS	NS	mg/kg	0.0027	U	0.0018	U	0.0019	U	0.0019	U	0.0015	U	0.0019	U
1,2-Dibromo-3-chloropropane	96-12-8			10	NS	mg/kg	0.004	U	0.0027	U	0.0028	U	0.0029	U	0.0023	U	0.0028	U
Hexachlorobutadiene	87-68-3			30	30	mg/kg	0.0054	U	0.0036	U	0.0038	U	0.0038	U	0.003	U	0.0037	U
Isopropylbenzene	98-82-8			1000	NS	mg/kg	0.0014	U	0.00089	U	0.00094	U	0.00096	U	0.00076	U	0.00093	U

Summary of Phase 1 Soil Sample Analytical Results
MBTA Green Line Extension Project
Washington Street
Somerville, Massachusetts

LOCATION								GLX-TPW-3081-1.5'		GLX-TPW-3091-1.5'		GLX-TPW-3121-1.5'		GLX-TPW-2131-4.5'		GLX-TPW-2132-4.5'		GLX-TPW-2141-3.5'	
SAMPLING DATE								5/31/2019		5/31/2019		5/31/2019		5/31/2019		5/31/2019		5/31/2019	
LAB SAMPLE ID								L1923201-03		L1923201-06		L1923201-09		L1923201-12		L1923201-15		L1923201-18	
SAMPLE TYPE								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE DEPTH (ft.)																			
		CasNum	MA-LLAND	MA-ULAND	RCS-1-14	S-1	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
MCP Volatile Organics by EPA 5035																			
	p-Isopropyltoluene	99-87-6			100	NS	mg/kg	0.0014	U	0.00089	U	0.00094	U	0.00096	U	0.00076	U	0.00093	U
	Naphthalene	91-20-3			4	4	mg/kg	0.0054	U	0.0036	U	0.0038	U	0.0038	U	0.003	U	0.0037	U
	n-Propylbenzene	103-65-1			100	NS	mg/kg	0.0014	U	0.00089	U	0.00094	U	0.00096	U	0.00076	U	0.00093	U
	1,2,3-Trichlorobenzene	87-61-6				NS	mg/kg	0.0027	U	0.0018	U	0.0019	U	0.0019	U	0.0015	U	0.0019	U
	1,2,4-Trichlorobenzene	120-82-1			2	2	mg/kg	0.0027	U	0.0018	U	0.0019	U	0.0019	U	0.0015	U	0.0019	U
	1,3,5-Trimethylbenzene	108-67-8			10	NS	mg/kg	0.0027	U	0.0018	U	0.0019	U	0.0019	U	0.0015	U	0.0019	U
	1,2,4-Trimethylbenzene	95-63-6			1000	NS	mg/kg	0.0027	U	0.0018	U	0.0019	U	0.0019	U	0.0015	U	0.0019	U
	Diethyl ether	60-29-7			100	NS	mg/kg	0.0027	U	0.0018	U	0.0019	U	0.0019	U	0.0015	U	0.0019	U
	Diisopropyl Ether	108-20-3			100	NS	mg/kg	0.0027	U	0.0018	U	0.0019	U	0.0019	U	0.0015	U	0.0019	U
	Ethyl-Tert-Butyl-Ether	637-92-3				NS	mg/kg	0.0027	U	0.0018	U	0.0019	U	0.0019	U	0.0015	U	0.0019	U
	Tertiary-Amyl Methyl Ether	994-05-8				NS	mg/kg	0.0027	U	0.0018	U	0.0019	U	0.0019	U	0.0015	U	0.0019	U
	1,4-Dioxane	123-91-1			0.2	0.2	mg/kg	0.11	U	0.071	U	0.075	U	0.077	U	0.061	U	0.075	U
	Total VOCs		10	4			mg/kg												

Yellow shading indicates detected result is equal to or above one or more of the listed criteria.

Gray shading indicates nondetect detection limit is above one or more of the listed criteria.

Bold typeface indicates detection above metiond detection limit.

MA-LLAND: Lined Landfill Limits current as of August, 1997
MA-ULAND: UnLined Landfill Limits current as of August, 1997
RCS-1-14: MCP 2014 RCS-1 Reportable Concentrations Criteria effective April 25, 2014.
MCP 2014 S-1 Cleanup Criteria effective April 25, 2014; the lowest S-1/GW-X standard is shown.
**EPA-TCLP: EPA Toxicity Characteristic (TCLP) Regulatory Levels Criteria per 40CFR Part 261 as of September 10, 2015.

U - Not detected at the reported detection limit for the sample.
ND - Not detected.
E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

¹ - The laboratory reported two sets of VOC results due to internal standard and/or surrogate nonconformances.
The highest detected results and lowest detection limits have been tabulated. Refer to laboratory report for further detail.

² - The laboratory reported three sets of VOC results due to internal standard and/or surrogate nonconformances.
The highest detected results from the low-level analysis and detection limits from the high-level analysis have been tabulated due to significant internal standard issues with the low-level analysis. Refer to laboratory report for further detail.

Summary of Phase 1 Soil Sample Analytical Results
MBTA Green Line Extension Project
Washington Street
Somerville, Massachusetts

LOCATION							GLX-TPW-2142-3.5'		GLX-TPW-503-4.5'		GLX-TPW-504-5'		GLX-TPW-505-5'	
SAMPLING DATE							5/31/2019		5/31/2019		5/31/2019		5/31/2019	
LAB SAMPLE ID							L1923201-21		L1923201-24		L1923201-27		L1923201-30	
SAMPLE TYPE							SOIL		SOIL		SOIL		SOIL	
SAMPLE DEPTH (ft.)														
	CasNum	MA-LLAND	MA-ULAND	RCS-1-14	S-1	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry														
Solids, Total	NONE					%	92.2		91.4		92.3		90.3	
MCP Volatile Organics by EPA 5035														
Methylene chloride	75-09-2			0.1	NS	mg/kg	0.0054	U	0.0054	U	0.0043	U	0.0038	U
1,1-Dichloroethane	75-34-3			0.4	0.4	mg/kg	0.0011	U	0.0011	U	0.00086	U	0.00077	U
Chloroform	67-66-3			0.2	0.2	mg/kg	0.0016	U	0.0016	U	0.0013	U	0.0012	U
Carbon tetrachloride	56-23-5			5	5	mg/kg	0.0011	U	0.0011	U	0.00086	U	0.00077	U
1,2-Dichloropropane	78-87-5			0.1	0.1	mg/kg	0.0011	U	0.0011	U	0.00086	U	0.00077	U
Dibromochloromethane	124-48-1			0.005	0.005	mg/kg	0.0011	U	0.0011	U	0.00086	U	0.00077	U
1,1,2-Trichloroethane	79-00-5			0.1	0.1	mg/kg	0.0011	U	0.0011	U	0.00086	U	0.00077	U
Tetrachloroethene	127-18-4			1	1	mg/kg	0.0068		0.0006		0.00043	U	0.00038	U
Chlorobenzene	108-90-7			1	1	mg/kg	0.00054	U	0.00054	U	0.00043	U	0.00038	U
Trichlorofluoromethane	75-69-4			1000	NS	mg/kg	0.0043	U	0.0044	U	0.0034	U	0.0031	U
1,2-Dichloroethane	107-06-2			0.1	0.1	mg/kg	0.0011	U	0.0011	U	0.00086	U	0.00077	U
1,1,1-Trichloroethane	71-55-6			30	30	mg/kg	0.00076		0.00054		0.00043	U	0.00038	U
Bromodichloromethane	75-27-4			0.1	0.1	mg/kg	0.00054	U	0.00054	U	0.00043	U	0.00038	U
trans-1,3-Dichloropropene	10061-02-6			0.01	NS	mg/kg	0.0011	U	0.0011	U	0.00086	U	0.00077	U
cis-1,3-Dichloropropene	10061-01-5			0.01	NS	mg/kg	0.00054	U	0.00054	U	0.00043	U	0.00038	U
1,3-Dichloropropene, Total	542-75-6			0.01	0.01	mg/kg	0.00054	U	0.00054	U	0.00043	U	0.00038	U
1,1-Dichloropropene	563-58-6			NS	NS	mg/kg	0.00054	U	0.00054	U	0.00043	U	0.00038	U
Bromoform	75-25-2			0.1	0.1	mg/kg	0.0043	U	0.0044	U	0.0034	U	0.0031	U
1,1,2,2-Tetrachloroethane	79-34-5			0.005	0.005	mg/kg	0.00054	U	0.00054	U	0.00043	U	0.00038	U
Benzene	71-43-2			2	2	mg/kg	0.00054	U	0.00054	U	0.00043	U	0.00038	U
Toluene	108-88-3			30	30	mg/kg	0.0019		0.0014		0.0012		0.00077	U
Ethylbenzene	100-41-4			40	40	mg/kg	0.0011	U	0.0011	U	0.00086	U	0.00077	U
Chloromethane	74-87-3			100	NS	mg/kg	0.0043	U	0.0044	U	0.0034	U	0.0031	U
Bromomethane	74-83-9			0.5	0.5	mg/kg	0.0022	U	0.0022	U	0.0017	U	0.0015	U
Vinyl chloride	75-01-4			0.7	0.7	mg/kg	0.0011	U	0.0011	U	0.00086	U	0.00077	U
Chloroethane	75-00-3			100	NS	mg/kg	0.0022	U	0.0022	U	0.0017	U	0.0015	U
1,1-Dichloroethene	75-35-4			3	3	mg/kg	0.0011	U	0.0011	U	0.00086	U	0.00077	U
trans-1,2-Dichloroethene	156-60-5			1	1	mg/kg	0.0016	U	0.0016	U	0.0013	U	0.0012	U
Trichloroethene	79-01-6			0.3	0.3	mg/kg	0.00054	U	0.00054	U	0.00043	U	0.00038	U
1,2-Dichlorobenzene	95-50-1			9	9	mg/kg	0.0022	U	0.0022	U	0.0017	U	0.0015	U
1,3-Dichlorobenzene	541-73-1			3	3	mg/kg	0.0022	U	0.0022	U	0.0017	U	0.0015	U
1,4-Dichlorobenzene	106-46-7			0.7	0.7	mg/kg	0.0022	U	0.0022	U	0.0017	U	0.0015	U
Methyl tert butyl ether	1634-04-4			0.1	0.1	mg/kg	0.0022	U	0.0022	U	0.0017	U	0.0015	U
p/m-Xylene	179601-23-1			100	100	mg/kg	0.0022	U	0.0022	U	0.0017	U	0.0015	U
o-Xylene	95-47-6			100	100	mg/kg	0.0011	U	0.0011	U	0.00086	U	0.00077	U
Xylenes, Total	1330-20-7			100	100	mg/kg	0.0011	U	0.0011	U	0.00086	U	0.00077	U
cis-1,2-Dichloroethene	156-59-2			0.1	0.1	mg/kg	0.0011	U	0.0011	U	0.00086	U	0.00077	U
1,2-Dichloroethene, Total	540-59-0				NS	mg/kg	0.0011	U	0.0011	U	0.00086	U	0.00077	U
Dibromomethane	74-95-3			500	NS	mg/kg	0.0022	U	0.0022	U	0.0017	U	0.0015	U
1,2,3-Trichloropropane	96-18-4			100	NS	mg/kg	0.0022	U	0.0022	U	0.0017	U	0.0015	U
Styrene	100-42-5			3	3	mg/kg	0.0011	U	0.0011	U	0.00086	U	0.00077	U
Dichlorodifluoromethane	75-71-8			1000	NS	mg/kg	0.011	U	0.011	U	0.0086	U	0.0077	U
Acetone	67-64-1			6	6	mg/kg	0.061		0.087		0.042		0.13	
Carbon disulfide	75-15-0			100	NS	mg/kg	0.011	U	0.011	U	0.0086	U	0.0077	U
Methyl ethyl ketone	78-93-3			4	4	mg/kg	0.011	U	0.011	U	0.0086	U	0.0077	U
Methyl isobutyl ketone	108-10-1			0.4	0.4	mg/kg	0.011	U	0.011	U	0.0086	U	0.0077	U
2-Hexanone	591-78-6			100	NS	mg/kg	0.011	U	0.011	U	0.0086	U	0.0077	U
Bromochloromethane	74-97-5				NS	mg/kg	0.0022	U	0.0022	U	0.0017	U	0.0015	U
Tetrahydrofuran	109-99-9			500	NS	mg/kg	0.0043	U	0.0044	U	0.0034	U	0.0031	U
2,2-Dichloropropane	594-20-7				NS	mg/kg	0.0022	U	0.0022	U	0.0017	U	0.0015	U
1,2-Dibromoethane	106-93-4			0.1	NS	mg/kg	0.0011	U	0.0011	U	0.00086	U	0.00077	U
1,3-Dichloropropane	142-28-9			500	NS	mg/kg	0.0022	U	0.0022	U	0.0017	U	0.0015	U
1,1,1,2-Tetrachloroethane	630-20-6			0.1	0.1	mg/kg	0.00054	U	0.00054	U	0.00043	U	0.00038	U
Bromobenzene	108-86-1			100	NS	mg/kg	0.0022	U	0.0022	U	0.0017	U	0.0015	U
n-Butylbenzene	104-51-8				NS	mg/kg	0.0011	U	0.0011	U	0.00086	U	0.00077	U
sec-Butylbenzene	135-98-8				NS	mg/kg	0.0011	U	0.0011	U	0.00086	U	0.00077	U
tert-Butylbenzene	98-06-6			100	NS	mg/kg	0.0022	U	0.0022	U	0.0017	U	0.0015	U
o-Chlorotoluene	95-49-8			100	NS	mg/kg	0.0022	U	0.0022	U	0.0017	U	0.0015	U
p-Chlorotoluene	106-43-4				NS	mg/kg	0.0022	U	0.0022	U	0.0017	U	0.0015	U
1,2-Dibromo-3-chloropropane	96-12-8			10	NS	mg/kg	0.0032	U	0.0033	U	0.0026	U	0.0023	U
Hexachlorobutadiene	87-68-3			30	30	mg/kg	0.0043	U	0.0044	U	0.0034	U	0.0031	U
Isopropylbenzene	98-82-8			1000	NS	mg/kg	0.0011	U	0.0011	U	0.00086	U	0.00077	U

Summary of Phase 1 Soil Sample Analytical Results
MBTA Green Line Extension Project
Washington Street
Somerville, Massachusetts

LOCATION								GLX-TPW-2142-3.5'		GLX-TPW-503-4.5'		GLX-TPW-504-5'		GLX-TPW-505-5'	
SAMPLING DATE								5/31/2019		5/31/2019		5/31/2019		5/31/2019	
LAB SAMPLE ID								L1923201-21		L1923201-24		L1923201-27		L1923201-30	
SAMPLE TYPE								SOIL		SOIL		SOIL		SOIL	
SAMPLE DEPTH (ft.)															
		CasNum	MA-LLAND	MA-ULAND	RCS-1-14	S-1	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual
MCP Volatile Organics by EPA 5035															
	p-Isopropyltoluene	99-87-6			100	NS	mg/kg	0.0011	U	0.0011	U	0.00086	U	0.00077	U
	Naphthalene	91-20-3			4	4	mg/kg	0.0043	U	0.0044	U	0.0034	U	0.0031	U
	n-Propylbenzene	103-65-1			100	NS	mg/kg	0.0011	U	0.0011	U	0.00086	U	0.00077	U
	1,2,3-Trichlorobenzene	87-61-6				NS	mg/kg	0.0022	U	0.0022	U	0.0017	U	0.0015	U
	1,2,4-Trichlorobenzene	120-82-1			2	2	mg/kg	0.0022	U	0.0022	U	0.0017	U	0.0015	U
	1,3,5-Trimethylbenzene	108-67-8			10	NS	mg/kg	0.0022	U	0.0022	U	0.0017	U	0.0015	U
	1,2,4-Trimethylbenzene	95-63-6			1000	NS	mg/kg	0.0022	U	0.0022	U	0.0017	U	0.0015	U
	Diethyl ether	60-29-7			100	NS	mg/kg	0.0022	U	0.0022	U	0.0017	U	0.0015	U
	Diisopropyl Ether	108-20-3			100	NS	mg/kg	0.0022	U	0.0022	U	0.0017	U	0.0015	U
	Ethyl-Tert-Butyl-Ether	637-92-3				NS	mg/kg	0.0022	U	0.0022	U	0.0017	U	0.0015	U
	Tertiary-Amyl Methyl Ether	994-05-8				NS	mg/kg	0.0022	U	0.0022	U	0.0017	U	0.0015	U
	1,4-Dioxane	123-91-1			0.2	0.2	mg/kg	0.087	U	0.087	U	0.069	U	0.062	U
	Total VOCs		10	4			mg/kg								

Yellow shading indicates detected result is equal to or above one or more of the listed criteria.

Gray shading indicates nondetect detection limit is above one or more of the listed criteria.

Bold typeface indicates detection above metiond detection limit.

MA-LLAND: Lined Landfill Limits current as of August, 1997
MA-ULAND: UnLined Landfill Limits current as of August, 1997
RCS-1-14: MCP 2014 RCS-1 Reportable Concentrations Criteria effective April 25, 2014.
MCP 2014 S-1 Cleanup Criteria effective April 25, 2014; the lowest S-1/GW-X standard is shown.
**EPA-TCLP: EPA Toxicity Characteristic (TCLP) Regulatory Levels Criteria per 40CFR Part 261 as of September 10, 2015.

U - Not detected at the reported detection limit for the sample.
ND - Not detected.
E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
¹ - The laboratory reported two sets of VOC results due to internal standard and/or surrogate nonconformances.
The highest detected results and lowest detection limits have been tabulated. Refer to laboratory report for further detail.
² - The laboratory reported three sets of VOC results due to internal standard and/or surrogate nonconformances.
The highest detected results from the low-level analysis and detection limits from the high-level analysis have been tabulated due to significant internal standard issues with the low-level analysis. Refer to laboratory report for further detail.

Summary of Phase 2 Soil Sample Analytical Results
MBTA Green Line Extension Project
Washington Street
Somerville, Massachusetts

LOCATION							GLX-TPW-601-VOC-2 ¹		GLX-TPW-601-VOC-3		GLX-TPW-601-VOC-6		TPW-615-VOC-1		GLX-TPW-615-VOC-4		
SAMPLING DATE							10/20/2019		10/20/2019		10/20/2019		10/20/2019		10/20/2019		
LAB SAMPLE ID							L1949294-28		L1949294-29		L1949294-30		L1949294-31		L1949294-32		
SAMPLE TYPE							SOIL		SOIL		SOIL		SOIL		SOIL		
SAMPLE DEPTH (ft.)																	
		CasNum	MA-LLAND	MA-ULAND	RCS-1-14	S-1	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry																	
Solids, Total		NONE					%	95.1		81.5		90.4		93.1		92.5	
MCP Volatile Organics by EPA 5035																	
	Methylene chloride	75-09-2			0.1	NS	mg/kg	0.0035	U	0.54	U	0.0038	U	0.0041	U	0.0033	U
	1,1-Dichloroethane	75-34-3			0.4	0.4	mg/kg	0.0007	U	0.11	U	0.00076	U	0.00082	U	0.00066	U
	Chloroform	67-66-3			0.2	0.2	mg/kg	0.001	U	0.16	U	0.0011	U	0.0012	U	0.00099	U
	Carbon tetrachloride	56-23-5			5	5	mg/kg	0.0007	U	0.11	U	0.00076	U	0.00082	U	0.00066	U
	1,2-Dichloropropane	78-87-5			0.1	0.1	mg/kg	0.0007	U	0.11	U	0.00076	U	0.00082	U	0.00066	U
	Dibromochloromethane	124-48-1			0.005	0.005	mg/kg	0.0007	U	0.11	U	0.00076	U	0.00082	U	0.00066	U
	1,1,2-Trichloroethane	79-00-5			0.1	0.1	mg/kg	0.0007	U	0.11	U	0.00076	U	0.00082	U	0.00066	U
	Tetrachloroethene	127-18-4			1	1	mg/kg	0.0012		0.7		0.00038	U	0.00041	U	0.00033	U
	Chlorobenzene	108-90-7			1	1	mg/kg	0.00035	U	0.054	U	0.00038	U	0.00041	U	0.00033	U
	Trichlorofluoromethane	75-69-4			1000	NS	mg/kg	0.0028	U	0.43	U	0.003	U	0.0033	U	0.0026	U
	1,2-Dichloroethane	107-06-2			0.1	0.1	mg/kg	0.0007	U	0.11	U	0.00076	U	0.00082	U	0.00066	U
	1,1,1-Trichloroethane	71-55-6			30	30	mg/kg	0.00035	U	0.054	U	0.00038	U	0.00041	U	0.00033	U
	Bromodichloromethane	75-27-4			0.1	0.1	mg/kg	0.00035	U	0.054	U	0.00038	U	0.00041	U	0.00033	U
	trans-1,3-Dichloropropene	10061-02-6			0.01	NS	mg/kg	0.0007	U	0.11	U	0.00076	U	0.00082	U	0.00066	U
	cis-1,3-Dichloropropene	10061-01-5			0.01	NS	mg/kg	0.00035	U	0.054	U	0.00038	U	0.00041	U	0.00033	U
	1,3-Dichloropropene, Total	542-75-6			0.01	0.01	mg/kg	0.00035	U	0.054	U	0.00038	U	0.00041	U	0.00033	U
	1,1-Dichloropropene	563-58-6				NS	mg/kg	0.00035	U	0.054	U	0.00038	U	0.00041	U	0.00033	U
	Bromoform	75-25-2			0.1	0.1	mg/kg	0.0028	U	0.43	U	0.003	U	0.0033	U	0.0026	U
	1,1,2,2-Tetrachloroethane	79-34-5			0.005	0.005	mg/kg	0.00035	U	0.054	U	0.00038	U	0.00041	U	0.00033	U
	Benzene	71-43-2			2	2	mg/kg	0.00035	U	0.054	U	0.00038	U	0.00041	U	0.00033	U
	Toluene	108-88-3			30	30	mg/kg	0.0007	U	0.11	U	0.00076	U	0.00082	U	0.00066	U
	Ethylbenzene	100-41-4			40	40	mg/kg	0.0007	U	0.11	U	0.00076	U	0.00082	U	0.00066	U
	Chloromethane	74-87-3			100	NS	mg/kg	0.0028	U	0.43	U	0.003	U	0.0033	U	0.0026	U
	Bromomethane	74-83-9			0.5	0.5	mg/kg	0.0014	U	0.22	U	0.0015	U	0.0016	U	0.0013	U
	Vinyl chloride	75-01-4			0.7	0.7	mg/kg	0.0007	U	0.11	U	0.00076	U	0.00082	U	0.00066	U
	Chloroethane	75-00-3			100	NS	mg/kg	0.0014	U	0.22	U	0.0015	U	0.0016	U	0.0013	U
	1,1-Dichloroethene	75-35-4			3	3	mg/kg	0.0007	U	0.11	U	0.00076	U	0.00082	U	0.00066	U
	trans-1,2-Dichloroethene	156-60-5			1	1	mg/kg	0.001	U	0.16	U	0.0011	U	0.0012	U	0.00099	U
	Trichloroethene	79-01-6			0.3	0.3	mg/kg	0.00035	U	0.054	U	0.00038	U	0.00041	U	0.00033	U
	1,2-Dichlorobenzene	95-50-1			9	9	mg/kg	0.0014	U	0.22	U	0.0015	U	0.0016	U	0.0013	U
	1,3-Dichlorobenzene	541-73-1			3	3	mg/kg	0.0014	U	0.22	U	0.0015	U	0.0016	U	0.0013	U
	1,4-Dichlorobenzene	106-46-7			0.7	0.7	mg/kg	0.0014	U	0.22	U	0.0015	U	0.0016	U	0.0013	U
	Methyl tert butyl ether	1634-04-4			0.1	0.1	mg/kg	0.0014	U	0.22	U	0.0015	U	0.0016	U	0.0013	U
	p/m-Xylene	179601-23-1			100	100	mg/kg	0.0014	U	0.22	U	0.0015	U	0.0016	U	0.0013	U
	o-Xylene	95-47-6			100	100	mg/kg	0.0007	U	0.11	U	0.00076	U	0.00082	U	0.00066	U
	Xylenes, Total	1330-20-7			100	100	mg/kg	0.0007	U	0.11	U	0.00076	U	0.00082	U	0.00066	U
	cis-1,2-Dichloroethene	156-59-2			0.1	0.1	mg/kg	0.0007	U	0.11	U	0.00076	U	0.00082	U	0.00066	U
	1,2-Dichloroethene, Total	540-59-0				NS	mg/kg	0.0007	U	0.11	U	0.00076	U	0.00082	U	0.00066	U
	Dibromomethane	74-95-3			500	NS	mg/kg	0.0014	U	0.22	U	0.0015	U	0.0016	U	0.0013	U
	1,2,3-Trichloropropane	96-18-4			100	NS	mg/kg	0.0014	U	0.22	U	0.0015	U	0.0016	U	0.0013	U
	Styrene	100-42-5			3	3	mg/kg	0.0007	U	0.11	U	0.00076	U	0.00082	U	0.00066	U
	Dichlorodifluoromethane	75-71-8			1000	NS	mg/kg	0.007	U	1.1	U	0.0076	U	0.0082	U	0.0066	U
	Acetone	67-64-1			6	6	mg/kg	0.097		1.1	U	0.034		0.02	U	0.016	U
	Carbon disulfide	75-15-0			100	NS	mg/kg	0.007	U	1.1	U	0.0076	U	0.0082	U	0.0066	U
	Methyl ethyl ketone	78-93-3			4	4	mg/kg	0.007	U	1.1	U	0.0076	U	0.0082	U	0.0066	U
	Methyl isobutyl ketone	108-10-1			0.4	0.4	mg/kg	0.007	U	1.1	U	0.0076	U	0.0082	U	0.0066	U
	2-Hexanone	591-78-6			100	NS	mg/kg	0.007	U	1.1	U	0.0076	U	0.0082	U	0.0066	U
	Bromochloromethane	74-97-5				NS	mg/kg	0.0014	U	0.22	U	0.0015	U	0.0016	U	0.0013	U
	Tetrahydrofuran	109-99-9			500	NS	mg/kg	0.0028	U	0.43	U	0.003	U	0.0033	U	0.0026	U

Summary of Phase 2 Soil Sample Analytical Results
MBTA Green Line Extension Project
Washington Street
Somerville, Massachusetts

LOCATION							GLX-TPW-601-VOC-2 ¹			GLX-TPW-601-VOC-3		GLX-TPW-601-VOC-6		TPW-615-VOC-1		GLX-TPW-615-VOC-4	
SAMPLING DATE							10/20/2019			10/20/2019		10/20/2019		10/20/2019		10/20/2019	
LAB SAMPLE ID							L1949294-28			L1949294-29		L1949294-30		L1949294-31		L1949294-32	
SAMPLE TYPE							SOIL			SOIL		SOIL		SOIL		SOIL	
SAMPLE DEPTH (ft.)																	
	CasNum	MA-LLAND	MA-ULAND	RCS-1-14	S-1	Units	Results	Qual		Results	Qual	Results	Qual	Results	Qual	Results	Qual
MCP Volatile Organics by EPA 5035							NS										
	2,2-Dichloropropane	594-20-7			NS	mg/kg	0.0014	U		0.22	U	0.0015	U	0.0016	U	0.0013	U
	1,2-Dibromoethane	106-93-4		0.1	NS	mg/kg	0.0007	U		0.11	U	0.00076	U	0.00082	U	0.00066	U
	1,3-Dichloropropane	142-28-9		500	0.1	mg/kg	0.0014	U		0.22	U	0.0015	U	0.0016	U	0.0013	U
	1,1,1,2-Tetrachloroethane	630-20-6		0.1	NS	mg/kg	0.00035	U		0.054	U	0.00038	U	0.00041	U	0.00033	U
	Bromobenzene	108-86-1		100	NS	mg/kg	0.0014	U		0.22	U	0.0015	U	0.0016	U	0.0013	U
	n-Butylbenzene	104-51-8			NS	mg/kg	0.0007	U		0.11	U	0.00076	U	0.00082	U	0.00066	U
	sec-Butylbenzene	135-98-8			NS	mg/kg	0.0007	U		0.11	U	0.00076	U	0.00082	U	0.00066	U
	tert-Butylbenzene	98-06-6		100	NS	mg/kg	0.0014	U		0.22	U	0.0015	U	0.0016	U	0.0013	U
	o-Chlorotoluene	95-49-8		100	NS	mg/kg	0.0014	U		0.22	U	0.0015	U	0.0016	U	0.0013	U
	p-Chlorotoluene	106-43-4			NS	mg/kg	0.0014	U		0.22	U	0.0015	U	0.0016	U	0.0013	U
	1,2-Dibromo-3-chloropropane	96-12-8		10	30	mg/kg	0.0021	U		0.33	U	0.0023	U	0.0024	U	0.002	U
	Hexachlorobutadiene	87-68-3		30	NS	mg/kg	0.0028	U		0.43	U	0.003	U	0.0033	U	0.0026	U
	Isopropylbenzene	98-82-8		1000		mg/kg	0.0007	U		0.11	U	0.00076	U	0.00082	U	0.00066	U
	p-Isopropyltoluene	99-87-6		100	NS	mg/kg	0.0007	U		0.11	U	0.00076	U	0.00082	U	0.00066	U
	Naphthalene	91-20-3		4	4	mg/kg	0.0028	U		0.43	U	0.003	U	0.0033	U	0.0026	U
	n-Propylbenzene	103-65-1		100	NS	mg/kg	0.0007	U		0.11	U	0.00076	U	0.00082	U	0.00066	U
	1,2,3-Trichlorobenzene	87-61-6			NS	mg/kg	0.0014	U		0.22	U	0.0015	U	0.0016	U	0.0013	U
	1,2,4-Trichlorobenzene	120-82-1		2	2	mg/kg	0.0014	U		0.22	U	0.0015	U	0.0016	U	0.0013	U
	1,3,5-Trimethylbenzene	108-67-8		10	NS	mg/kg	0.0014	U		0.22	U	0.0015	U	0.0016	U	0.0013	U
	1,2,4-Trimethylbenzene	95-63-6		1000	NS	mg/kg	0.0014	U		0.22	U	0.0015	U	0.0016	U	0.0013	U
	Diethyl ether	60-29-7		100	NS	mg/kg	0.0014	U		0.22	U	0.0015	U	0.0016	U	0.0013	U
	Diisopropyl Ether	108-20-3		100	NS	mg/kg	0.0014	U		0.22	U	0.0015	U	0.0016	U	0.0013	U
	Ethyl-Tert-Butyl-Ether	637-92-3			NS	mg/kg	0.0014	U		0.22	U	0.0015	U	0.0016	U	0.0013	U
	Tertiary-Amyl Methyl Ether	994-05-8			NS	mg/kg	0.0014	U		0.22	U	0.0015	U	0.0016	U	0.0013	U
	1,4-Dioxane	123-91-1		0.2	0.2	mg/kg	0.056	U		8.7	U	0.061	U	0.065	U	0.053	U

Yellow shading indicates detected result is equal to or above one or more of the listed criteria.
Gray shading indicates nondetect detection limit is above one or more of the listed criteria.
Bold typeface indicates detection above metiond detection limit.

MA-LLAND: Lined Landfill Limits current as of August, 1997
MA-ULAND: UnLined Landfill Limits current as of August, 1997
RCS-1-14: MCP 2014 RCS-1 Reportable Concentrations Criteria effective April 25, 2014.
MCP 2014 S-1 Cleanup Criteria effective April 25, 2014; the lowest S-1/GW-X standard is shown.
**EPA-TCLP: EPA Toxicity Characteristic (TCLP) Regulatory Levels Criteria per 40CFR Part 261 as of September 10, 2015.

U - Not detected at the reported detection limit for the sample.
ND - Not detected.
E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
¹ - The laboratory reported two sets of VOC results due to internal standard and/or surrogate nonconformances.
The highest detected results and lowest detection limits have been tabulated. Refer to laboratory report for further detail.
² - The laboratory reported three sets of VOC results due to internal standard and/or surrogate nonconformances.
The highest detected results from the low-level analysis and detection limits from the high-level analysis have been tabulated due to significant internal standard issues with the low-level analysis. Refer to laboratory report for further detail.

Summary of Phase 2 Soil Sample Analytical Results
MBTA Green Line Extension Project
Washington Street
Somerville, Massachusetts

LOCATION							GLX-TPW-615-VOC-7		GLX-TPW-615-VOC-10		GLX-TPW-615-VOC-13		GLX-TPW-602-VOC-2		GLX-TPW-602-VOC-4.5		GLX-TPW-602-VOC-6.5		
SAMPLING DATE							10/20/2019		10/20/2019		10/20/2019		10/20/2019		10/20/2019		10/20/2019		
LAB SAMPLE ID							L1949294-33		L1949294-34		L1949294-35		L1949294-36		L1949294-37		L1949294-38		
SAMPLE TYPE							SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		
SAMPLE DEPTH (ft.)																			
		CasNum	MA-LLAND	MA-ULAND	RCS-1-14	S-1	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry																			
	Solids, Total	NONE					%	96		93.4		90.2		91.7		93.4		84.8	
MCP Volatile Organics by EPA 5035																			
	Methylene chloride	75-09-2			0.1	NS	mg/kg	0.0036	U	0.0037	U	0.0034	U	0.28	U	2.4	U	0.005	U
	1,1-Dichloroethane	75-34-3			0.4	0.4	mg/kg	0.00071	U	0.00075	U	0.00067	U	0.056	U	0.47	U	0.001	U
	Chloroform	67-66-3			0.2	0.2	mg/kg	0.0011	U	0.0011	U	0.001	U	0.084	U	0.71	U	0.0015	U
	Carbon tetrachloride	56-23-5			5	5	mg/kg	0.00071	U	0.00075	U	0.00067	U	0.056	U	0.47	U	0.001	U
	1,2-Dichloropropane	78-87-5			0.1	0.1	mg/kg	0.00071	U	0.00075	U	0.00067	U	0.056	U	0.47	U	0.001	U
	Dibromochloromethane	124-48-1			0.005	0.005	mg/kg	0.00071	U	0.00075	U	0.00067	U	0.056	U	0.47	U	0.001	U
	1,1,2-Trichloroethane	79-00-5			0.1	0.1	mg/kg	0.00071	U	0.00075	U	0.00067	U	0.056	U	0.47	U	0.001	U
	Tetrachloroethene	127-18-4			1	1	mg/kg	0.00036	U	0.00037	U	0.00034	U	0.028	U	0.24	U	0.0005	U
	Chlorobenzene	108-90-7			1	1	mg/kg	0.00036	U	0.00037	U	0.00034	U	0.028	U	0.24	U	0.0005	U
	Trichlorofluoromethane	75-69-4			1000	NS	mg/kg	0.0028	U	0.003	U	0.0027	U	0.22	U	1.9	U	0.004	U
	1,2-Dichloroethane	107-06-2			0.1	0.1	mg/kg	0.00071	U	0.00075	U	0.00067	U	0.056	U	0.47	U	0.001	U
	1,1,1-Trichloroethane	71-55-6			30	30	mg/kg	0.00036	U	0.00037	U	0.00034	U	0.028	U	0.24	U	0.0005	U
	Bromodichloromethane	75-27-4			0.1	0.1	mg/kg	0.00036	U	0.00037	U	0.00034	U	0.028	U	0.24	U	0.0005	U
	trans-1,3-Dichloropropene	10061-02-6			0.01	NS	mg/kg	0.00071	U	0.00075	U	0.00067	U	0.056	U	0.47	U	0.001	U
	cis-1,3-Dichloropropene	10061-01-5			0.01	NS	mg/kg	0.00036	U	0.00037	U	0.00034	U	0.028	U	0.24	U	0.0005	U
	1,3-Dichloropropene, Total	542-75-6			0.01	0.01	mg/kg	0.00036	U	0.00037	U	0.00034	U	0.028	U	0.24	U	0.0005	U
	1,1-Dichloropropene	563-58-6				NS	mg/kg	0.00036	U	0.00037	U	0.00034	U	0.028	U	0.24	U	0.0005	U
	Bromoform	75-25-2			0.1	0.1	mg/kg	0.0028	U	0.003	U	0.0027	U	0.22	U	1.9	U	0.004	U
	1,1,2,2-Tetrachloroethane	79-34-5			0.005	0.005	mg/kg	0.00036	U	0.00037	U	0.00034	U	0.028	U	0.24	U	0.0005	U
	Benzene	71-43-2			2	2	mg/kg	0.00036	U	0.00037	U	0.00034	U	0.044		0.24	U	0.0005	U
	Toluene	108-88-3			30	30	mg/kg	0.00071	U	0.00075	U	0.00067	U	0.11		0.47	U	0.001	U
	Ethylbenzene	100-41-4			40	40	mg/kg	0.00071	U	0.00075	U	0.00067	U	0.056	U	0.47	U	0.001	U
	Chloromethane	74-87-3			100	NS	mg/kg	0.0028	U	0.003	U	0.0027	U	0.22	U	1.9	U	0.004	U
	Bromomethane	74-83-9			0.5	0.5	mg/kg	0.0014	U	0.0015	U	0.0013	U	0.11	U	0.94	U	0.002	U
	Vinyl chloride	75-01-4			0.7	0.7	mg/kg	0.00071	U	0.00075	U	0.00067	U	0.056	U	0.47	U	0.001	U
	Chloroethane	75-00-3			100	NS	mg/kg	0.0014	U	0.0015	U	0.0013	U	0.11	U	0.94	U	0.002	U
	1,1-Dichloroethene	75-35-4			3	3	mg/kg	0.00071	U	0.00075	U	0.00067	U	0.056	U	0.47	U	0.001	U
	trans-1,2-Dichloroethene	156-60-5			1	1	mg/kg	0.0011	U	0.0011	U	0.001	U	0.084	U	0.71	U	0.0015	U
	Trichloroethene	79-01-6			0.3	0.3	mg/kg	0.00036	U	0.00037	U	0.00034	U	0.028	U	0.24	U	0.0005	U
	1,2-Dichlorobenzene	95-50-1			9	9	mg/kg	0.0014	U	0.0015	U	0.0013	U	0.11	U	0.94	U	0.002	U
	1,3-Dichlorobenzene	541-73-1			3	3	mg/kg	0.0014	U	0.0015	U	0.0013	U	0.11	U	0.94	U	0.002	U
	1,4-Dichlorobenzene	106-46-7			0.7	0.7	mg/kg	0.0014	U	0.0015	U	0.0013	U	0.11	U	0.94	U	0.002	U
	Methyl tert butyl ether	1634-04-4			0.1	0.1	mg/kg	0.0014	U	0.0015	U	0.0013	U	0.11	U	0.94	U	0.002	U
	p/m-Xylene	179601-23-1			100	100	mg/kg	0.0014	U	0.0015	U	0.0013	U	0.11	U	0.94	U	0.002	U
	o-Xylene	95-47-6			100	100	mg/kg	0.00071	U	0.00075	U	0.00067	U	0.078		0.47	U	0.001	U
	Xylenes, Total	1330-20-7			100	100	mg/kg	0.00071	U	0.00075	U	0.00067	U	0.078		0.47	U	0.001	U
	cis-1,2-Dichloroethene	156-59-2			0.1	0.1	mg/kg	0.00071	U	0.00075	U	0.00067	U	0.056	U	0.47	U	0.001	U
	1,2-Dichloroethene, Total	540-59-0				NS	mg/kg	0.00071	U	0.00075	U	0.00067	U	0.056	U	0.47	U	0.001	U
	Dibromomethane	74-95-3			500	NS	mg/kg	0.0014	U	0.0015	U	0.0013	U	0.11	U	0.94	U	0.002	U
	1,2,3-Trichloropropane	96-18-4			100	NS	mg/kg	0.0014	U	0.0015	U	0.0013	U	0.11	U	0.94	U	0.002	U
	Styrene	100-42-5			3	3	mg/kg	0.00071	U	0.00075	U	0.00067	U	0.056	U	0.47	U	0.001	U
	Dichlorodifluoromethane	75-71-8			1000	NS	mg/kg	0.0071	U	0.0075	U	0.0067	U	0.56	U	4.7	U	0.01	U
	Acetone	67-64-1			6	6	mg/kg	0.036		0.062		0.021		0.56	U	4.7	U	0.11	
	Carbon disulfide	75-15-0			100	NS	mg/kg	0.0071	U	0.0075	U	0.0067	U	0.56	U	4.7	U	0.01	U
	Methyl ethyl ketone	78-93-3			4	4	mg/kg	0.0071	U	0.0075	U	0.0067	U	0.56	U	4.7	U	0.01	U
	Methyl isobutyl ketone	108-10-1			0.4	0.4	mg/kg	0.0071	U	0.0075	U	0.0067	U	0.56	U	4.7	U	0.01	U
	2-Hexanone	591-78-6			100	NS	mg/kg	0.0071	U	0.0075	U	0.0067	U	0.56	U	4.7	U	0.01	U
	Bromochloromethane	74-97-5				NS	mg/kg	0.0014	U	0.0015	U	0.0013	U	0.11	U	0.94	U	0.002	U
	Tetrahydrofuran	109-99-9			500	NS	mg/kg	0.0028	U	0.003	U	0.0027	U	0.22	U	1.9	U	0.004	U

Summary of Phase 2 Soil Sample Analytical Results
MBTA Green Line Extension Project
Washington Street
Somerville, Massachusetts

LOCATION							GLX-TPW-615-VOC-7		GLX-TPW-615-VOC-10		GLX-TPW-615-VOC-13		GLX-TPW-602-VOC-2		GLX-TPW-602-VOC-4.5		GLX-TPW-602-VOC-6.5	
SAMPLING DATE							10/20/2019		10/20/2019		10/20/2019		10/20/2019		10/20/2019		10/20/2019	
LAB SAMPLE ID							L1949294-33		L1949294-34		L1949294-35		L1949294-36		L1949294-37		L1949294-38	
SAMPLE TYPE							SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE DEPTH (ft.)																		
	CasNum	MA-LLAND	MA-ULAND	RCS-1-14	S-1	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
MCP Volatile Organics by EPA 5035							NS											
	2,2-Dichloropropane	594-20-7			NS	mg/kg	0.0014	U	0.0015	U	0.0013	U	0.11	U	0.94	U	0.002	U
	1,2-Dibromoethane	106-93-4		0.1	NS	mg/kg	0.00071	U	0.00075	U	0.00067	U	0.056	U	0.47	U	0.001	U
	1,3-Dichloropropane	142-28-9		500	0.1	mg/kg	0.0014	U	0.0015	U	0.0013	U	0.11	U	0.94	U	0.002	U
	1,1,1,2-Tetrachloroethane	630-20-6		0.1	NS	mg/kg	0.00036	U	0.00037	U	0.00034	U	0.028	U	0.24	U	0.0005	U
	Bromobenzene	108-86-1		100	NS	mg/kg	0.0014	U	0.0015	U	0.0013	U	0.11	U	0.94	U	0.002	U
	n-Butylbenzene	104-51-8			NS	mg/kg	0.00071	U	0.00075	U	0.00067	U	0.056	U	0.47	U	0.001	U
	sec-Butylbenzene	135-98-8			NS	mg/kg	0.00071	U	0.00075	U	0.00067	U	0.056	U	0.47	U	0.001	U
	tert-Butylbenzene	98-06-6		100	NS	mg/kg	0.0014	U	0.0015	U	0.0013	U	0.11	U	0.94	U	0.002	U
	o-Chlorotoluene	95-49-8		100	NS	mg/kg	0.0014	U	0.0015	U	0.0013	U	0.11	U	0.94	U	0.002	U
	p-Chlorotoluene	106-43-4			NS	mg/kg	0.0014	U	0.0015	U	0.0013	U	0.11	U	0.94	U	0.002	U
	1,2-Dibromo-3-chloropropane	96-12-8		10	30	mg/kg	0.0021	U	0.0022	U	0.002	U	0.17	U	1.4	U	0.003	U
	Hexachlorobutadiene	87-68-3		30	NS	mg/kg	0.0028	U	0.003	U	0.0027	U	0.22	U	1.9	U	0.004	U
	Isopropylbenzene	98-82-8		1000		mg/kg	0.00071	U	0.00075	U	0.00067	U	0.056	U	0.47	U	0.001	U
	p-Isopropyltoluene	99-87-6		100	NS	mg/kg	0.00071	U	0.00075	U	0.00067	U	0.056	U	0.47	U	0.001	U
	Naphthalene	91-20-3		4	4	mg/kg	0.0028	U	0.003	U	0.0027	U	1		93		0.004	U
	n-Propylbenzene	103-65-1		100	NS	mg/kg	0.00071	U	0.00075	U	0.00067	U	0.056	U	0.47	U	0.001	U
	1,2,3-Trichlorobenzene	87-61-6			NS	mg/kg	0.0014	U	0.0015	U	0.0013	U	0.11	U	0.94	U	0.002	U
	1,2,4-Trichlorobenzene	120-82-1		2	2	mg/kg	0.0014	U	0.0015	U	0.0013	U	0.11	U	0.94	U	0.002	U
	1,3,5-Trimethylbenzene	108-67-8		10	NS	mg/kg	0.0014	U	0.0015	U	0.0013	U	0.11	U	0.94	U	0.002	U
	1,2,4-Trimethylbenzene	95-63-6		1000	NS	mg/kg	0.0014	U	0.0015	U	0.0013	U	0.11	U	1.2		0.002	U
	Diethyl ether	60-29-7		100	NS	mg/kg	0.0014	U	0.0015	U	0.0013	U	0.11	U	0.94	U	0.002	U
	Diisopropyl Ether	108-20-3		100	NS	mg/kg	0.0014	U	0.0015	U	0.0013	U	0.11	U	0.94	U	0.002	U
	Ethyl-Tert-Butyl-Ether	637-92-3			NS	mg/kg	0.0014	U	0.0015	U	0.0013	U	0.11	U	0.94	U	0.002	U
	Tertiary-Amyl Methyl Ether	994-05-8			NS	mg/kg	0.0014	U	0.0015	U	0.0013	U	0.11	U	0.94	U	0.002	U
	1,4-Dioxane	123-91-1		0.2	0.2	mg/kg	0.057	U	0.06	U	0.054	U	4.5	U	38	U	0.08	U

Yellow shading indicates detected result is equal to or above one or more of the listed criteria.
Gray shading indicates nondetect detection limit is above one or more of the listed criteria.
Bold typeface indicates detection above metiond detection limit.

MA-LLAND: Lined Landfill Limits current as of August, 1997
MA-ULAND: UnLined Landfill Limits current as of August, 1997
RCS-1-14: MCP 2014 RCS-1 Reportable Concentrations Criteria effective April 25, 2014.
MCP 2014 S-1 Cleanup Criteria effective April 25, 2014; the lowest S-1/GW-X standard is shown.
**EPA-TCLP: EPA Toxicity Characteristic (TCLP) Regulatory Levels Criteria per 40CFR Part 261 as of September 10, 2015.

- U - Not detected at the reported detection limit for the sample.
ND - Not detected.
E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- ¹ - The laboratory reported two sets of VOC results due to internal standard and/or surrogate nonconformances.
The highest detected results and lowest detection limits have been tabulated. Refer to laboratory report for further detail.
- ² - The laboratory reported three sets of VOC results due to internal standard and/or surrogate nonconformances.
The highest detected results from the low-level analysis and detection limits from the high-level analysis have been tabulated due to significant internal standard issues with the low-level analysis. Refer to laboratory report for further detail.

Summary of Phase 2 Soil Sample Analytical Results
MBTA Green Line Extension Project
Washington Street
Somerville, Massachusetts

LOCATION							GLX-TPW-603-VOC-1.5		GLX-TPW-603-VOC-3		GLX-TPW-604-VOC-1		GLX-TPW-604-VOC-3		GLX-TPW-605-VOC-1		GLX-TPW-605-VOC-3		
SAMPLING DATE							10/20/2019		10/20/2019		10/20/2019		10/20/2019		10/20/2019		10/20/2019		
LAB SAMPLE ID							L1949294-39		L1949294-40		L1949294-41		L1949294-42		L1949294-43		L1949294-44		
SAMPLE TYPE							SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		
SAMPLE DEPTH (ft.)																			
		CasNum	MA-LLAND	MA-ULAND	RCS-1-14	S-1	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual		
General Chemistry																			
	Solids, Total	NONE					%	96.2		95.7		96.3		90.9		92.7		88.2	
MCP Volatile Organics by EPA 5035																			
	Methylene chloride	75-09-2			0.1	NS	mg/kg	0.0033	U	0.0033	U	0.0034	U	0.0045	U	0.0041	U	0.0047	U
	1,1-Dichloroethane	75-34-3			0.4	0.4	mg/kg	0.00066	U	0.00065	U	0.00068	U	0.00089	U	0.00081	U	0.00094	U
	Chloroform	67-66-3			0.2	0.2	mg/kg	0.001	U	0.00098	U	0.001	U	0.0013	U	0.0012	U	0.0014	U
	Carbon tetrachloride	56-23-5			5	5	mg/kg	0.00066	U	0.00065	U	0.00068	U	0.00089	U	0.00081	U	0.00094	U
	1,2-Dichloropropane	78-87-5			0.1	0.1	mg/kg	0.00066	U	0.00065	U	0.00068	U	0.00089	U	0.00081	U	0.00094	U
	Dibromochloromethane	124-48-1			0.005	0.005	mg/kg	0.00066	U	0.00065	U	0.00068	U	0.00089	U	0.00081	U	0.00094	U
	1,1,2-Trichloroethane	79-00-5			0.1	0.1	mg/kg	0.00066	U	0.00065	U	0.00068	U	0.00089	U	0.00081	U	0.00094	U
	Tetrachloroethene	127-18-4			1	1	mg/kg	0.00033	U	0.00033	U	0.00034	U	0.00045	U	0.00041	U	0.00047	U
	Chlorobenzene	108-90-7			1	1	mg/kg	0.00033	U	0.00033	U	0.00034	U	0.00045	U	0.00041	U	0.00047	U
	Trichlorofluoromethane	75-69-4			1000	NS	mg/kg	0.0027	U	0.0026	U	0.0027	U	0.0036	U	0.0032	U	0.0038	U
	1,2-Dichloroethane	107-06-2			0.1	0.1	mg/kg	0.00066	U	0.00065	U	0.00068	U	0.00089	U	0.00081	U	0.00094	U
	1,1,1-Trichloroethane	71-55-6			30	30	mg/kg	0.00033	U	0.00033	U	0.00034	U	0.00045	U	0.00041	U	0.00047	U
	Bromodichloromethane	75-27-4			0.1	0.1	mg/kg	0.00033	U	0.00033	U	0.00034	U	0.00045	U	0.00041	U	0.00047	U
	trans-1,3-Dichloropropene	10061-02-6			0.01	NS	mg/kg	0.00066	U	0.00065	U	0.00068	U	0.00089	U	0.00081	U	0.00094	U
	cis-1,3-Dichloropropene	10061-01-5			0.01	NS	mg/kg	0.00033	U	0.00033	U	0.00034	U	0.00045	U	0.00041	U	0.00047	U
	1,3-Dichloropropene, Total	542-75-6			0.01	0.01	mg/kg	0.00033	U	0.00033	U	0.00034	U	0.00045	U	0.00041	U	0.00047	U
	1,1-Dichloropropene	563-58-6				NS	mg/kg	0.00033	U	0.00033	U	0.00034	U	0.00045	U	0.00041	U	0.00047	U
	Bromoform	75-25-2			0.1	0.1	mg/kg	0.0027	U	0.0026	U	0.0027	U	0.0036	U	0.0032	U	0.0038	U
	1,1,2,2-Tetrachloroethane	79-34-5			0.005	0.005	mg/kg	0.00033	U	0.00033	U	0.00034	U	0.00045	U	0.00041	U	0.00047	U
	Benzene	71-43-2			2	2	mg/kg	0.00033	U	0.00033	U	0.00034	U	0.00061		0.00041	U	0.00047	U
	Toluene	108-88-3			30	30	mg/kg	0.00066	U	0.00065	U	0.00068	U	0.00089	U	0.00081	U	0.00094	U
	Ethylbenzene	100-41-4			40	40	mg/kg	0.00066	U	0.00065	U	0.00068	U	0.00089	U	0.00081	U	0.00094	U
	Chloromethane	74-87-3			100	NS	mg/kg	0.0027	U	0.0026	U	0.0027	U	0.0036	U	0.0032	U	0.0038	U
	Bromomethane	74-83-9			0.5	0.5	mg/kg	0.0013	U	0.0013	U	0.0014	U	0.0018	U	0.0016	U	0.0019	U
	Vinyl chloride	75-01-4			0.7	0.7	mg/kg	0.00066	U	0.00065	U	0.00068	U	0.00089	U	0.00081	U	0.00094	U
	Chloroethane	75-00-3			100	NS	mg/kg	0.0013	U	0.0013	U	0.0014	U	0.0018	U	0.0016	U	0.0019	U
	1,1-Dichloroethene	75-35-4			3	3	mg/kg	0.00066	U	0.00065	U	0.00068	U	0.00089	U	0.00081	U	0.00094	U
	trans-1,2-Dichloroethene	156-60-5			1	1	mg/kg	0.001	U	0.00098	U	0.001	U	0.0013	U	0.0012	U	0.0014	U
	Trichloroethene	79-01-6			0.3	0.3	mg/kg	0.00033	U	0.00033	U	0.00034	U	0.00045	U	0.00041	U	0.00047	U
	1,2-Dichlorobenzene	95-50-1			9	9	mg/kg	0.0013	U	0.0013	U	0.0014	U	0.0018	U	0.0016	U	0.0019	U
	1,3-Dichlorobenzene	541-73-1			3	3	mg/kg	0.0013	U	0.0013	U	0.0014	U	0.0018	U	0.0016	U	0.0019	U
	1,4-Dichlorobenzene	106-46-7			0.7	0.7	mg/kg	0.0013	U	0.0013	U	0.0014	U	0.0018	U	0.0016	U	0.0019	U
	Methyl tert butyl ether	1634-04-4			0.1	0.1	mg/kg	0.0013	U	0.0013	U	0.0014	U	0.0018	U	0.0016	U	0.0019	U
	p/m-Xylene	179601-23-1			100	100	mg/kg	0.0013	U	0.0013	U	0.0014	U	0.0018	U	0.0016	U	0.0019	U
	o-Xylene	95-47-6			100	100	mg/kg	0.00066	U	0.00065	U	0.00068	U	0.00089	U	0.00081	U	0.00094	U
	Xylenes, Total	1330-20-7			100	100	mg/kg	0.00066	U	0.00065	U	0.00068	U	0.00089	U	0.00081	U	0.00094	U
	cis-1,2-Dichloroethene	156-59-2			0.1	0.1	mg/kg	0.00066	U	0.00065	U	0.00068	U	0.00089	U	0.00081	U	0.00094	U
	1,2-Dichloroethene, Total	540-59-0				NS	mg/kg	0.00066	U	0.00065	U	0.00068	U	0.00089	U	0.00081	U	0.00094	U
	Dibromomethane	74-95-3			500	NS	mg/kg	0.0013	U	0.0013	U	0.0014	U	0.0018	U	0.0016	U	0.0019	U
	1,2,3-Trichloropropane	96-18-4			100	NS	mg/kg	0.0013	U	0.0013	U	0.0014	U	0.0018	U	0.0016	U	0.0019	U
	Styrene	100-42-5			3	3	mg/kg	0.00066	U	0.00065	U	0.00068	U	0.00089	U	0.00081	U	0.00094	U
	Dichlorodifluoromethane	75-71-8			1000	NS	mg/kg	0.0066	U	0.0065	U	0.0068	U	0.0089	U	0.0081	U	0.0094	U
	Acetone	67-64-1			6	6	mg/kg	0.022		0.027		0.049		0.041		0.034		0.092	
	Carbon disulfide	75-15-0			100	NS	mg/kg	0.0066	U	0.0065	U	0.0068	U	0.0089	U	0.0081	U	0.0094	U
	Methyl ethyl ketone	78-93-3			4	4	mg/kg	0.0066	U	0.0065	U	0.0068	U	0.0089	U	0.0081	U	0.0094	U
	Methyl isobutyl ketone	108-10-1			0.4	0.4	mg/kg	0.0066	U	0.0065	U	0.0068	U	0.0089	U	0.0081	U	0.0094	U
	2-Hexanone	591-78-6			100	NS	mg/kg	0.0066	U	0.0065	U	0.0068	U	0.0089	U	0.0081	U	0.0094	U
	Bromochloromethane	74-97-5				NS	mg/kg	0.0013	U	0.0013	U	0.0014	U	0.0018	U	0.0016	U	0.0019	U
	Tetrahydrofuran	109-99-9			500	NS	mg/kg	0.0027	U	0.0026	U	0.0027	U	0.0036	U	0.0032	U	0.0038	U

Summary of Phase 2 Soil Sample Analytical Results
MBTA Green Line Extension Project
Washington Street
Somerville, Massachusetts

LOCATION							GLX-TPW-603-VOC-1.5		GLX-TPW-603-VOC-3		GLX-TPW-604-VOC-1		GLX-TPW-604-VOC-3		GLX-TPW-605-VOC-1		GLX-TPW-605-VOC-3	
SAMPLING DATE							10/20/2019		10/20/2019		10/20/2019		10/20/2019		10/20/2019		10/20/2019	
LAB SAMPLE ID							L1949294-39		L1949294-40		L1949294-41		L1949294-42		L1949294-43		L1949294-44	
SAMPLE TYPE							SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE DEPTH (ft.)																		
	CasNum	MA-LLAND	MA-ULAND	RCS-1-14	S-1	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
MCP Volatile Organics by EPA 5035						NS												
	2,2-Dichloropropane	594-20-7			NS	mg/kg	0.0013	U	0.0013	U	0.0014	U	0.0018	U	0.0016	U	0.0019	U
	1,2-Dibromoethane	106-93-4		0.1	NS	mg/kg	0.00066	U	0.00065	U	0.00068	U	0.00089	U	0.00081	U	0.00094	U
	1,3-Dichloropropane	142-28-9		500	0.1	mg/kg	0.0013	U	0.0013	U	0.0014	U	0.0018	U	0.0016	U	0.0019	U
	1,1,1,2-Tetrachloroethane	630-20-6		0.1	NS	mg/kg	0.00033	U	0.00033	U	0.00034	U	0.00045	U	0.00041	U	0.00047	U
	Bromobenzene	108-86-1		100	NS	mg/kg	0.0013	U	0.0013	U	0.0014	U	0.0018	U	0.0016	U	0.0019	U
	n-Butylbenzene	104-51-8			NS	mg/kg	0.00066	U	0.00065	U	0.00068	U	0.00089	U	0.00081	U	0.00094	U
	sec-Butylbenzene	135-98-8			NS	mg/kg	0.00066	U	0.00065	U	0.00068	U	0.00089	U	0.00081	U	0.00094	U
	tert-Butylbenzene	98-06-6		100	NS	mg/kg	0.0013	U	0.0013	U	0.0014	U	0.0018	U	0.0016	U	0.0019	U
	o-Chlorotoluene	95-49-8		100	NS	mg/kg	0.0013	U	0.0013	U	0.0014	U	0.0018	U	0.0016	U	0.0019	U
	p-Chlorotoluene	106-43-4			NS	mg/kg	0.0013	U	0.0013	U	0.0014	U	0.0018	U	0.0016	U	0.0019	U
	1,2-Dibromo-3-chloropropane	96-12-8		10	30	mg/kg	0.002	U	0.002	U	0.002	U	0.0027	U	0.0024	U	0.0028	U
	Hexachlorobutadiene	87-68-3		30	NS	mg/kg	0.0027	U	0.0026	U	0.0027	U	0.0036	U	0.0032	U	0.0038	U
	Isopropylbenzene	98-82-8		1000		mg/kg	0.00066	U	0.00065	U	0.00068	U	0.00089	U	0.00081	U	0.00094	U
	p-Isopropyltoluene	99-87-6		100	NS	mg/kg	0.00066	U	0.00065	U	0.00068	U	0.00089	U	0.00081	U	0.00094	U
	Naphthalene	91-20-3		4	4	mg/kg	0.0027	U	0.0026	U	0.0027	U	0.0036	U	0.0032	U	0.0038	U
	n-Propylbenzene	103-65-1		100	NS	mg/kg	0.00066	U	0.00065	U	0.00068	U	0.00089	U	0.00081	U	0.00094	U
	1,2,3-Trichlorobenzene	87-61-6			NS	mg/kg	0.0013	U	0.0013	U	0.0014	U	0.0018	U	0.0016	U	0.0019	U
	1,2,4-Trichlorobenzene	120-82-1		2	2	mg/kg	0.0013	U	0.0013	U	0.0014	U	0.0018	U	0.0016	U	0.0019	U
	1,3,5-Trimethylbenzene	108-67-8		10	NS	mg/kg	0.0013	U	0.0013	U	0.0014	U	0.0018	U	0.0016	U	0.0019	U
	1,2,4-Trimethylbenzene	95-63-6		1000	NS	mg/kg	0.0013	U	0.0013	U	0.0014	U	0.0018	U	0.0016	U	0.0019	U
	Diethyl ether	60-29-7		100	NS	mg/kg	0.0013	U	0.0013	U	0.0014	U	0.0018	U	0.0016	U	0.0019	U
	Diisopropyl Ether	108-20-3		100	NS	mg/kg	0.0013	U	0.0013	U	0.0014	U	0.0018	U	0.0016	U	0.0019	U
	Ethyl-Tert-Butyl-Ether	637-92-3			NS	mg/kg	0.0013	U	0.0013	U	0.0014	U	0.0018	U	0.0016	U	0.0019	U
	Tertiary-Amyl Methyl Ether	994-05-8			NS	mg/kg	0.0013	U	0.0013	U	0.0014	U	0.0018	U	0.0016	U	0.0019	U
	1,4-Dioxane	123-91-1		0.2	0.2	mg/kg	0.053	U	0.052	U	0.054	U	0.072	U	0.065	U	0.075	U

Yellow shading indicates detected result is equal to or above one or more of the listed criteria.
Gray shading indicates nondetect detection limit is above one or more of the listed criteria.
Bold typeface indicates detection above metiond detection limit.

MA-LLAND: Lined Landfill Limits current as of August, 1997
MA-ULAND: UnLined Landfill Limits current as of August, 1997
RCS-1-14: MCP 2014 RCS-1 Reportable Concentrations Criteria effective April 25, 2014.
MCP 2014 S-1 Cleanup Criteria effective April 25, 2014; the lowest S-1/GW-X standard is shown.
**EPA-TCLP: EPA Toxicity Characteristic (TCLP) Regulatory Levels Criteria per 40CFR Part 261 as of September 10, 2015.

U - Not detected at the reported detection limit for the sample.
ND - Not detected.
E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
¹ - The laboratory reported two sets of VOC results due to internal standard and/or surrogate nonconformances.
The highest detected results and lowest detection limits have been tabulated. Refer to laboratory report for further detail.
² - The laboratory reported three sets of VOC results due to internal standard and/or surrogate nonconformances.
The highest detected results from the low-level analysis and detection limits from the high-level analysis have been tabulated due to significant internal standard issues with the low-level analysis. Refer to laboratory report for further detail.

Summary of Phase 2 Soil Sample Analytical Results
MBTA Green Line Extension Project
Washington Street
Somerville, Massachusetts

LOCATION							DUPA		GLX-TPW-605-VOC-8		GLX-TPW-607-VOC-.6		GLX-TPW-607-VOC-4.6		GLX-TPW-611-VOC-1.5		GLX-TPW-611-VOC-4		
SAMPLING DATE							10/20/2019		10/20/2019		10/20/2019		10/20/2019		10/20/2019		10/20/2019		
LAB SAMPLE ID							L1949294-45		L1949294-46		L1949294-47		L1949294-48		L1949294-49		L1949294-50		
SAMPLE TYPE							SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		
SAMPLE DEPTH (ft.)																			
		CasNum	MA-LLAND	MA-ULAND	RCS-1-14	S-1	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry																			
	Solids, Total	NONE					%	88.4		87.1		93.3		90.9		85		93.8	
MCP Volatile Organics by EPA 5035																			
	Methylene chloride	75-09-2			0.1	NS	mg/kg	0.005	U	0.0036	U	0.0038	U	0.0039	U	0.0049	U	0.0037	U
	1,1-Dichloroethane	75-34-3			0.4	0.4	mg/kg	0.001	U	0.00072	U	0.00075	U	0.00078	U	0.00098	U	0.00074	U
	Chloroform	67-66-3			0.2	0.2	mg/kg	0.0015	U	0.0011	U	0.0011	U	0.0012	U	0.0015	U	0.0011	U
	Carbon tetrachloride	56-23-5			5	5	mg/kg	0.001	U	0.00072	U	0.00075	U	0.00078	U	0.00098	U	0.00074	U
	1,2-Dichloropropane	78-87-5			0.1	0.1	mg/kg	0.001	U	0.00072	U	0.00075	U	0.00078	U	0.00098	U	0.00074	U
	Dibromochloromethane	124-48-1			0.005	0.005	mg/kg	0.001	U	0.00072	U	0.00075	U	0.00078	U	0.00098	U	0.00074	U
	1,1,2-Trichloroethane	79-00-5			0.1	0.1	mg/kg	0.001	U	0.00072	U	0.00075	U	0.00078	U	0.00098	U	0.00074	U
	Tetrachloroethene	127-18-4			1	1	mg/kg	0.0005	U	0.00036	U	0.00038	U	0.00039	U	0.00049	U	0.00037	U
	Chlorobenzene	108-90-7			1	1	mg/kg	0.0005	U	0.00036	U	0.00038	U	0.00039	U	0.00049	U	0.00037	U
	Trichlorofluoromethane	75-69-4			1000	NS	mg/kg	0.004	U	0.0029	U	0.003	U	0.0031	U	0.0039	U	0.003	U
	1,2-Dichloroethane	107-06-2			0.1	0.1	mg/kg	0.001	U	0.00072	U	0.00075	U	0.00078	U	0.00098	U	0.00074	U
	1,1,1-Trichloroethane	71-55-6			30	30	mg/kg	0.0005	U	0.00036	U	0.00038	U	0.00039	U	0.00049	U	0.00037	U
	Bromodichloromethane	75-27-4			0.1	0.1	mg/kg	0.0005	U	0.00036	U	0.00038	U	0.00039	U	0.00049	U	0.00037	U
	trans-1,3-Dichloropropene	10061-02-6			0.01	NS	mg/kg	0.001	U	0.00072	U	0.00075	U	0.00078	U	0.00098	U	0.00074	U
	cis-1,3-Dichloropropene	10061-01-5			0.01	NS	mg/kg	0.0005	U	0.00036	U	0.00038	U	0.00039	U	0.00049	U	0.00037	U
	1,3-Dichloropropene, Total	542-75-6			0.01	0.01	mg/kg	0.0005	U	0.00036	U	0.00038	U	0.00039	U	0.00049	U	0.00037	U
	1,1-Dichloropropene	563-58-6				NS	mg/kg	0.0005	U	0.00036	U	0.00038	U	0.00039	U	0.00049	U	0.00037	U
	Bromoform	75-25-2			0.1	0.1	mg/kg	0.004	U	0.0029	U	0.003	U	0.0031	U	0.0039	U	0.003	U
	1,1,2,2-Tetrachloroethane	79-34-5			0.005	0.005	mg/kg	0.0005	U	0.00036	U	0.00038	U	0.00039	U	0.00049	U	0.00037	U
	Benzene	71-43-2			2	2	mg/kg	0.0005	U	0.00036	U	0.00038	U	0.00039	U	0.00049	U	0.00037	U
	Toluene	108-88-3			30	30	mg/kg	0.001	U	0.00072	U	0.00075	U	0.00078	U	0.00098	U	0.00074	U
	Ethylbenzene	100-41-4			40	40	mg/kg	0.001	U	0.00072	U	0.00075	U	0.00078	U	0.00098	U	0.00074	U
	Chloromethane	74-87-3			100	NS	mg/kg	0.004	U	0.0029	U	0.003	U	0.0031	U	0.0039	U	0.003	U
	Bromomethane	74-83-9			0.5	0.5	mg/kg	0.002	U	0.0014	U	0.0015	U	0.0016	U	0.002	U	0.0015	U
	Vinyl chloride	75-01-4			0.7	0.7	mg/kg	0.001	U	0.00072	U	0.00075	U	0.00078	U	0.00098	U	0.00074	U
	Chloroethane	75-00-3			100	NS	mg/kg	0.002	U	0.0014	U	0.0015	U	0.0016	U	0.002	U	0.0015	U
	1,1-Dichloroethene	75-35-4			3	3	mg/kg	0.001	U	0.00072	U	0.00075	U	0.00078	U	0.00098	U	0.00074	U
	trans-1,2-Dichloroethene	156-60-5			1	1	mg/kg	0.0015	U	0.0011	U	0.0011	U	0.0012	U	0.0015	U	0.0011	U
	Trichloroethene	79-01-6			0.3	0.3	mg/kg	0.0005	U	0.00036	U	0.00038	U	0.00039	U	0.00049	U	0.00037	U
	1,2-Dichlorobenzene	95-50-1			9	9	mg/kg	0.002	U	0.0014	U	0.0015	U	0.0016	U	0.002	U	0.0015	U
	1,3-Dichlorobenzene	541-73-1			3	3	mg/kg	0.002	U	0.0014	U	0.0015	U	0.0016	U	0.002	U	0.0015	U
	1,4-Dichlorobenzene	106-46-7			0.7	0.7	mg/kg	0.002	U	0.0014	U	0.0015	U	0.0016	U	0.002	U	0.0015	U
	Methyl tert butyl ether	1634-04-4			0.1	0.1	mg/kg	0.002	U	0.0014	U	0.0015	U	0.0016	U	0.002	U	0.0015	U
	p/m-Xylene	179601-23-1			100	100	mg/kg	0.002	U	0.0014	U	0.0015	U	0.0016	U	0.002	U	0.0015	U
	o-Xylene	95-47-6			100	100	mg/kg	0.001	U	0.00072	U	0.00075	U	0.00078	U	0.00098	U	0.00074	U
	Xylenes, Total	1330-20-7			100	100	mg/kg	0.001	U	0.00072	U	0.00075	U	0.00078	U	0.00098	U	0.00074	U
	cis-1,2-Dichloroethene	156-59-2			0.1	0.1	mg/kg	0.001	U	0.00072	U	0.00075	U	0.00078	U	0.00098	U	0.00074	U
	1,2-Dichloroethene, Total	540-59-0				NS	mg/kg	0.001	U	0.00072	U	0.00075	U	0.00078	U	0.00098	U	0.00074	U
	Dibromomethane	74-95-3			500	NS	mg/kg	0.002	U	0.0014	U	0.0015	U	0.0016	U	0.002	U	0.0015	U
	1,2,3-Trichloropropane	96-18-4			100	NS	mg/kg	0.002	U	0.0014	U	0.0015	U	0.0016	U	0.002	U	0.0015	U
	Styrene	100-42-5			3	3	mg/kg	0.001	U	0.00072	U	0.00075	U	0.00078	U	0.00098	U	0.00074	U
	Dichlorodifluoromethane	75-71-8			1000	NS	mg/kg	0.01	U	0.0072	U	0.0075	U	0.0078	U	0.0098	U	0.0074	U
	Acetone	67-64-1			6	6	mg/kg	0.061		0.018	U	0.066		0.03		0.091		0.028	
	Carbon disulfide	75-15-0			100	NS	mg/kg	0.01	U	0.0072	U	0.0075	U	0.0078	U	0.0098	U	0.0074	U
	Methyl ethyl ketone	78-93-3			4	4	mg/kg	0.01	U	0.0072	U	0.0075	U	0.0078	U	0.0098	U	0.0074	U
	Methyl isobutyl ketone	108-10-1			0.4	0.4	mg/kg	0.01	U	0.0072	U	0.0075	U	0.0078	U	0.0098	U	0.0074	U
	2-Hexanone	591-78-6			100	NS	mg/kg	0.01	U	0.0072	U	0.0075	U	0.0078	U	0.0098	U	0.0074	U
	Bromochloromethane	74-97-5				NS	mg/kg	0.002	U	0.0014	U	0.0015	U	0.0016	U	0.002	U	0.0015	U
	Tetrahydrofuran	109-99-9			500	NS	mg/kg	0.004	U	0.0029	U	0.003	U	0.0031	U	0.0039		0.003	U

Summary of Phase 2 Soil Sample Analytical Results
MBTA Green Line Extension Project
Washington Street
Somerville, Massachusetts

LOCATION							DUPA		GLX-TPW-605-VOC-8		GLX-TPW-607-VOC-.6		GLX-TPW-607-VOC-4.6		GLX-TPW-611-VOC-1.5		GLX-TPW-611-VOC-4	
SAMPLING DATE							10/20/2019		10/20/2019		10/20/2019		10/20/2019		10/20/2019		10/20/2019	
LAB SAMPLE ID							L1949294-45		L1949294-46		L1949294-47		L1949294-48		L1949294-49		L1949294-50	
SAMPLE TYPE							SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE DEPTH (ft.)																		
		CasNum	MA-LLAND	MA-ULAND	RCS-1-14	S-1	Units		Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
MCP Volatile Organics by EPA 5035							NS											
	2,2-Dichloropropane	594-20-7				NS	mg/kg		0.002	U	0.0014	U	0.0015	U	0.0016	U	0.002	U
	1,2-Dibromoethane	106-93-4			0.1	NS	mg/kg		0.001	U	0.00072	U	0.00075	U	0.00078	U	0.00098	U
	1,3-Dichloropropane	142-28-9			500	0.1	mg/kg		0.002	U	0.0014	U	0.0015	U	0.0016	U	0.002	U
	1,1,1,2-Tetrachloroethane	630-20-6			0.1	NS	mg/kg		0.0005	U	0.00036	U	0.00038	U	0.00039	U	0.00049	U
	Bromobenzene	108-86-1			100	NS	mg/kg		0.002	U	0.0014	U	0.0015	U	0.0016	U	0.002	U
	n-Butylbenzene	104-51-8				NS	mg/kg		0.001	U	0.00072	U	0.00075	U	0.00078	U	0.00098	U
	sec-Butylbenzene	135-98-8				NS	mg/kg		0.001	U	0.00072	U	0.00075	U	0.00078	U	0.00098	U
	tert-Butylbenzene	98-06-6			100	NS	mg/kg		0.002	U	0.0014	U	0.0015	U	0.0016	U	0.002	U
	o-Chlorotoluene	95-49-8			100	NS	mg/kg		0.002	U	0.0014	U	0.0015	U	0.0016	U	0.002	U
	p-Chlorotoluene	106-43-4				NS	mg/kg		0.002	U	0.0014	U	0.0015	U	0.0016	U	0.002	U
	1,2-Dibromo-3-chloropropane	96-12-8			10	30	mg/kg		0.003	U	0.0022	U	0.0022	U	0.0024	U	0.0029	U
	Hexachlorobutadiene	87-68-3			30	NS	mg/kg		0.004	U	0.0029	U	0.003	U	0.0031	U	0.0039	U
	Isopropylbenzene	98-82-8			1000		mg/kg		0.001	U	0.00072	U	0.00075	U	0.00078	U	0.00098	U
	p-Isopropyltoluene	99-87-6			100	NS	mg/kg		0.001	U	0.00072	U	0.00075	U	0.00078	U	0.00098	U
	Naphthalene	91-20-3			4	4	mg/kg		0.004	U	0.0029	U	0.003	U	0.0031	U	0.0039	U
	n-Propylbenzene	103-65-1			100	NS	mg/kg		0.001	U	0.00072	U	0.00075	U	0.00078	U	0.00098	U
	1,2,3-Trichlorobenzene	87-61-6				NS	mg/kg		0.002	U	0.0014	U	0.0015	U	0.0016	U	0.002	U
	1,2,4-Trichlorobenzene	120-82-1			2	2	mg/kg		0.002	U	0.0014	U	0.0015	U	0.0016	U	0.002	U
	1,3,5-Trimethylbenzene	108-67-8			10	NS	mg/kg		0.002	U	0.0014	U	0.0015	U	0.0016	U	0.002	U
	1,2,4-Trimethylbenzene	95-63-6			1000	NS	mg/kg		0.002	U	0.0014	U	0.0015	U	0.0016	U	0.002	U
	Diethyl ether	60-29-7			100	NS	mg/kg		0.002	U	0.0014	U	0.0015	U	0.0016	U	0.002	U
	Diisopropyl Ether	108-20-3			100	NS	mg/kg		0.002	U	0.0014	U	0.0015	U	0.0016	U	0.002	U
	Ethyl-Tert-Butyl-Ether	637-92-3				NS	mg/kg		0.002	U	0.0014	U	0.0015	U	0.0016	U	0.002	U
	Tertiary-Amyl Methyl Ether	994-05-8				NS	mg/kg		0.002	U	0.0014	U	0.0015	U	0.0016	U	0.002	U
	1,4-Dioxane	123-91-1			0.2	0.2	mg/kg		0.08	U	0.057	U	0.06	U	0.063	U	0.078	U

Yellow shading indicates detected result is equal to or above one or more of the listed criteria.
Gray shading indicates nondetect detection limit is above one or more of the listed criteria.
Bold typeface indicates detection above metiond detection limit.

MA-LLAND: Lined Landfill Limits current as of August, 1997
MA-ULAND: UnLined Landfill Limits current as of August, 1997
RCS-1-14: MCP 2014 RCS-1 Reportable Concentrations Criteria effective April 25, 2014.
MCP 2014 S-1 Cleanup Criteria effective April 25, 2014; the lowest S-1/GW-X standard is shown.
**EPA-TCLP: EPA Toxicity Characteristic (TCLP) Regulatory Levels Criteria per 40CFR Part 261 as of September 10, 2015.

U - Not detected at the reported detection limit for the sample.
ND - Not detected.
E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
¹ - The laboratory reported two sets of VOC results due to internal standard and/or surrogate nonconformances.
The highest detected results and lowest detection limits have been tabulated. Refer to laboratory report for further detail.
² - The laboratory reported three sets of VOC results due to internal standard and/or surrogate nonconformances.
The highest detected results from the low-level analysis and detection limits from the high-level analysis have been tabulated due to significant internal standard issues with the low-level analysis. Refer to laboratory report for further detail.

Summary of Phase 2 Soil Sample Analytical Results
MBTA Green Line Extension Project
Washington Street
Somerville, Massachusetts

LOCATION							GLX-TPW-612-VOC-1.5		GLX-TPW-612-VOC-4		GLX-TPW-613-VOC-1.5		GLX-TPW-613-VOC-4		GLX-TPW-614-VOC-1		GLX-TPW-614-VOC-4		
SAMPLING DATE							10/20/2019		10/20/2019		10/20/2019		10/20/2019		10/20/2019		10/20/2019		
LAB SAMPLE ID							L1949294-51		L1949294-52		L1949294-53		L1949294-54		L1949294-55		L1949294-56		
SAMPLE TYPE							SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		
SAMPLE DEPTH (ft.)																			
		CasNum	MA-LLAND	MA-ULAND	RCS-1-14	S-1	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual		
General Chemistry																			
Solids, Total		NONE					%	94.2		92.6		93.4		92.5		92.5		93.8	
MCP Volatile Organics by EPA 5035																			
	Methylene chloride	75-09-2			0.1	NS	mg/kg	0.0042	U	0.0038	U	0.0034	U	0.0049	U	0.0043	U	0.0035	U
	1,1-Dichloroethane	75-34-3			0.4	0.4	mg/kg	0.00084	U	0.00076	U	0.00068	U	0.00098	U	0.00085	U	0.0007	U
	Chloroform	67-66-3			0.2	0.2	mg/kg	0.0013	U	0.0011	U	0.001	U	0.0015	U	0.0013	U	0.001	U
	Carbon tetrachloride	56-23-5			5	5	mg/kg	0.00084	U	0.00076	U	0.00068	U	0.00098	U	0.00085	U	0.0007	U
	1,2-Dichloropropane	78-87-5			0.1	0.1	mg/kg	0.00084	U	0.00076	U	0.00068	U	0.00098	U	0.00085	U	0.0007	U
	Dibromochloromethane	124-48-1			0.005	0.005	mg/kg	0.00084	U	0.00076	U	0.00068	U	0.00098	U	0.00085	U	0.0007	U
	1,1,2-Trichloroethane	79-00-5			0.1	0.1	mg/kg	0.00084	U	0.00076	U	0.00068	U	0.00098	U	0.00085	U	0.0007	U
	Tetrachloroethene	127-18-4			1	1	mg/kg	0.00042	U	0.00038	U	0.00034	U	0.00049	U	0.00043	U	0.00035	U
	Chlorobenzene	108-90-7			1	1	mg/kg	0.00042	U	0.00038	U	0.00034	U	0.00049	U	0.00043	U	0.00035	U
	Trichlorofluoromethane	75-69-4			1000	NS	mg/kg	0.0034	U	0.003	U	0.0027	U	0.0039	U	0.0034	U	0.0028	U
	1,2-Dichloroethane	107-06-2			0.1	0.1	mg/kg	0.00084	U	0.00076	U	0.00068	U	0.00098	U	0.00085	U	0.0007	U
	1,1,1-Trichloroethane	71-55-6			30	30	mg/kg	0.00042	U	0.00038	U	0.00034	U	0.00049	U	0.00043	U	0.00035	U
	Bromodichloromethane	75-27-4			0.1	0.1	mg/kg	0.00042	U	0.00038	U	0.00034	U	0.00049	U	0.00043	U	0.00035	U
	trans-1,3-Dichloropropene	10061-02-6			0.01	NS	mg/kg	0.00084	U	0.00076	U	0.00068	U	0.00098	U	0.00085	U	0.0007	U
	cis-1,3-Dichloropropene	10061-01-5			0.01	NS	mg/kg	0.00042	U	0.00038	U	0.00034	U	0.00049	U	0.00043	U	0.00035	U
	1,3-Dichloropropene, Total	542-75-6			0.01	0.01	mg/kg	0.00042	U	0.00038	U	0.00034	U	0.00049	U	0.00043	U	0.00035	U
	1,1-Dichloropropene	563-58-6				NS	mg/kg	0.00042	U	0.00038	U	0.00034	U	0.00049	U	0.00043	U	0.00035	U
	Bromoform	75-25-2			0.1	0.1	mg/kg	0.0034	U	0.003	U	0.0027	U	0.0039	U	0.0034	U	0.0028	U
	1,1,2,2-Tetrachloroethane	79-34-5			0.005	0.005	mg/kg	0.00042	U	0.00038	U	0.00034	U	0.00049	U	0.00043	U	0.00035	U
	Benzene	71-43-2			2	2	mg/kg	0.00042	U	0.00038	U	0.00034	U	0.00049	U	0.00043	U	0.00035	U
	Toluene	108-88-3			30	30	mg/kg	0.00084	U	0.00076	U	0.00068	U	0.00098	U	0.00085	U	0.0007	U
	Ethylbenzene	100-41-4			40	40	mg/kg	0.00084	U	0.00076	U	0.00068	U	0.00098	U	0.00085	U	0.0007	U
	Chloromethane	74-87-3			100	NS	mg/kg	0.0034	U	0.003	U	0.0027	U	0.0039	U	0.0034	U	0.0028	U
	Bromomethane	74-83-9			0.5	0.5	mg/kg	0.0017	U	0.0015	U	0.0014	U	0.002	U	0.0017	U	0.0014	U
	Vinyl chloride	75-01-4			0.7	0.7	mg/kg	0.00084	U	0.00076	U	0.00068	U	0.00098	U	0.00085	U	0.0007	U
	Chloroethane	75-00-3			100	NS	mg/kg	0.0017	U	0.0015	U	0.0014	U	0.002	U	0.0017	U	0.0014	U
	1,1-Dichloroethene	75-35-4			3	3	mg/kg	0.00084	U	0.00076	U	0.00068	U	0.00098	U	0.00085	U	0.0007	U
	trans-1,2-Dichloroethene	156-60-5			1	1	mg/kg	0.0013	U	0.0011	U	0.001	U	0.0015	U	0.0013	U	0.001	U
	Trichloroethene	79-01-6			0.3	0.3	mg/kg	0.00042	U	0.00038	U	0.00034	U	0.00049	U	0.00043	U	0.00035	U
	1,2-Dichlorobenzene	95-50-1			9	9	mg/kg	0.0017	U	0.0015	U	0.0014	U	0.002	U	0.0017	U	0.0014	U
	1,3-Dichlorobenzene	541-73-1			3	3	mg/kg	0.0017	U	0.0015	U	0.0014	U	0.002	U	0.0017	U	0.0014	U
	1,4-Dichlorobenzene	106-46-7			0.7	0.7	mg/kg	0.0017	U	0.0015	U	0.0014	U	0.002	U	0.0017	U	0.0014	U
	Methyl tert butyl ether	1634-04-4			0.1	0.1	mg/kg	0.0017	U	0.0015	U	0.0014	U	0.002	U	0.0017	U	0.0014	U
	p/m-Xylene	179601-23-1			100	100	mg/kg	0.0017	U	0.0015	U	0.0014	U	0.002	U	0.0017	U	0.0014	U
	o-Xylene	95-47-6			100	100	mg/kg	0.00084	U	0.00076	U	0.00068	U	0.00098	U	0.00085	U	0.0007	U
	Xylenes, Total	1330-20-7			100	100	mg/kg	0.00084	U	0.00076	U	0.00068	U	0.00098	U	0.00085	U	0.0007	U
	cis-1,2-Dichloroethene	156-59-2			0.1	0.1	mg/kg	0.00084	U	0.00076	U	0.00068	U	0.00098	U	0.00085	U	0.0007	U
	1,2-Dichloroethene, Total	540-59-0				NS	mg/kg	0.00084	U	0.00076	U	0.00068	U	0.00098	U	0.00085	U	0.0007	U
	Dibromomethane	74-95-3			500	NS	mg/kg	0.0017	U	0.0015	U	0.0014	U	0.002	U	0.0017	U	0.0014	U
	1,2,3-Trichloropropane	96-18-4			100	NS	mg/kg	0.0017	U	0.0015	U	0.0014	U	0.002	U	0.0017	U	0.0014	U
	Styrene	100-42-5			3	3	mg/kg	0.00084	U	0.00076	U	0.00068	U	0.00098	U	0.00085	U	0.0007	U
	Dichlorodifluoromethane	75-71-8			1000	NS	mg/kg	0.0084	U	0.0076	U	0.0068	U	0.0098	U	0.0085	U	0.007	U
	Acetone	67-64-1			6	6	mg/kg	0.08		0.059		0.028		0.032		0.066		0.017	U
	Carbon disulfide	75-15-0			100	NS	mg/kg	0.0084	U	0.0076	U	0.0068	U	0.0098	U	0.0085	U	0.007	U
	Methyl ethyl ketone	78-93-3			4	4	mg/kg	0.0084	U	0.0076	U	0.0068	U	0.0098	U	0.0085	U	0.007	U
	Methyl isobutyl ketone	108-10-1			0.4	0.4	mg/kg	0.0084	U	0.0076	U	0.0068	U	0.0098	U	0.0085	U	0.007	U
	2-Hexanone	591-78-6			100	NS	mg/kg	0.0084	U	0.0076	U	0.0068	U	0.0098	U	0.0085	U	0.007	U
	Bromochloromethane	74-97-5				NS	mg/kg	0.0017	U	0.0015	U	0.0014	U	0.002	U	0.0017	U	0.0014	U
	Tetrahydrofuran	109-99-9			500	NS	mg/kg	0.0034	U	0.003	U	0.0027	U	0.0039	U	0.0034	U	0.0028	U

Summary of Phase 2 Soil Sample Analytical Results
MBTA Green Line Extension Project
Washington Street
Somerville, Massachusetts

LOCATION							GLX-TPW-612-VOC-1.5		GLX-TPW-612-VOC-4		GLX-TPW-613-VOC-1.5		GLX-TPW-613-VOC-4		GLX-TPW-614-VOC-1		GLX-TPW-614-VOC-4	
SAMPLING DATE							10/20/2019		10/20/2019		10/20/2019		10/20/2019		10/20/2019		10/20/2019	
LAB SAMPLE ID							L1949294-51		L1949294-52		L1949294-53		L1949294-54		L1949294-55		L1949294-56	
SAMPLE TYPE							SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE DEPTH (ft.)																		
	CasNum	MA-LLAND	MA-ULAND	RCS-1-14	S-1	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
MCP Volatile Organics by EPA 5035							NS											
	2,2-Dichloropropane	594-20-7			NS	mg/kg	0.0017	U	0.0015	U	0.0014	U	0.002	U	0.0017	U	0.0014	U
	1,2-Dibromoethane	106-93-4		0.1	NS	mg/kg	0.00084	U	0.00076	U	0.00068	U	0.00098	U	0.00085	U	0.0007	U
	1,3-Dichloropropane	142-28-9		500	0.1	mg/kg	0.0017	U	0.0015	U	0.0014	U	0.002	U	0.0017	U	0.0014	U
	1,1,1,2-Tetrachloroethane	630-20-6		0.1	NS	mg/kg	0.00042	U	0.00038	U	0.00034	U	0.00049	U	0.00043	U	0.00035	U
	Bromobenzene	108-86-1		100	NS	mg/kg	0.0017	U	0.0015	U	0.0014	U	0.002	U	0.0017	U	0.0014	U
	n-Butylbenzene	104-51-8			NS	mg/kg	0.00084	U	0.00076	U	0.00068	U	0.00098	U	0.00085	U	0.0007	U
	sec-Butylbenzene	135-98-8			NS	mg/kg	0.00084	U	0.00076	U	0.00068	U	0.00098	U	0.00085	U	0.0007	U
	tert-Butylbenzene	98-06-6		100	NS	mg/kg	0.0017	U	0.0015	U	0.0014	U	0.002	U	0.0017	U	0.0014	U
	o-Chlorotoluene	95-49-8		100	NS	mg/kg	0.0017	U	0.0015	U	0.0014	U	0.002	U	0.0017	U	0.0014	U
	p-Chlorotoluene	106-43-4			NS	mg/kg	0.0017	U	0.0015	U	0.0014	U	0.002	U	0.0017	U	0.0014	U
	1,2-Dibromo-3-chloropropane	96-12-8		10	30	mg/kg	0.0025	U	0.0023	U	0.002	U	0.0029	U	0.0026	U	0.0021	U
	Hexachlorobutadiene	87-68-3		30	NS	mg/kg	0.0034	U	0.003	U	0.0027	U	0.0039	U	0.0034	U	0.0028	U
	Isopropylbenzene	98-82-8		1000		mg/kg	0.00084	U	0.00076	U	0.00068	U	0.00098	U	0.00085	U	0.0007	U
	p-Isopropyltoluene	99-87-6		100	NS	mg/kg	0.00084	U	0.00076	U	0.00068	U	0.00098	U	0.00085	U	0.0007	U
	Naphthalene	91-20-3		4	4	mg/kg	0.0034	U	0.003	U	0.0027	U	0.0039	U	0.0034	U	0.0028	U
	n-Propylbenzene	103-65-1		100	NS	mg/kg	0.00084	U	0.00076	U	0.00068	U	0.00098	U	0.00085	U	0.0007	U
	1,2,3-Trichlorobenzene	87-61-6			NS	mg/kg	0.0017	U	0.0015	U	0.0014	U	0.002	U	0.0017	U	0.0014	U
	1,2,4-Trichlorobenzene	120-82-1		2	2	mg/kg	0.0017	U	0.0015	U	0.0014	U	0.002	U	0.0017	U	0.0014	U
	1,3,5-Trimethylbenzene	108-67-8		10	NS	mg/kg	0.0017	U	0.0015	U	0.0014	U	0.002	U	0.0017	U	0.0014	U
	1,2,4-Trimethylbenzene	95-63-6		1000	NS	mg/kg	0.0017	U	0.0015	U	0.0014	U	0.002	U	0.0017	U	0.0014	U
	Diethyl ether	60-29-7		100	NS	mg/kg	0.0017	U	0.0015	U	0.0014	U	0.002	U	0.0017	U	0.0014	U
	Diisopropyl Ether	108-20-3		100	NS	mg/kg	0.0017	U	0.0015	U	0.0014	U	0.002	U	0.0017	U	0.0014	U
	Ethyl-Tert-Butyl-Ether	637-92-3			NS	mg/kg	0.0017	U	0.0015	U	0.0014	U	0.002	U	0.0017	U	0.0014	U
	Tertiary-Amyl Methyl Ether	994-05-8			NS	mg/kg	0.0017	U	0.0015	U	0.0014	U	0.002	U	0.0017	U	0.0014	U
	1,4-Dioxane	123-91-1		0.2	0.2	mg/kg	0.067	U	0.06	U	0.054	U	0.078	U	0.068	U	0.056	U

Yellow shading indicates detected result is equal to or above one or more of the listed criteria.
Gray shading indicates nondetect detection limit is above one or more of the listed criteria.
Bold typeface indicates detection above metiond detection limit.

MA-LLAND: Lined Landfill Limits current as of August, 1997
MA-ULAND: UnLined Landfill Limits current as of August, 1997
RCS-1-14: MCP 2014 RCS-1 Reportable Concentrations Criteria effective April 25, 2014.
MCP 2014 S-1 Cleanup Criteria effective April 25, 2014; the lowest S-1/GW-X standard is shown.
**EPA-TCLP: EPA Toxicity Characteristic (TCLP) Regulatory Levels Criteria per 40CFR Part 261 as of September 10, 2015.

U - Not detected at the reported detection limit for the sample.
ND - Not detected.
E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
¹ - The laboratory reported two sets of VOC results due to internal standard and/or surrogate nonconformances.
The highest detected results and lowest detection limits have been tabulated. Refer to laboratory report for further detail.
² - The laboratory reported three sets of VOC results due to internal standard and/or surrogate nonconformances.
The highest detected results from the low-level analysis and detection limits from the high-level analysis have been tabulated due to significant internal standard issues with the low-level analysis. Refer to laboratory report for further detail.

Summary of Phase 2 Soil Sample Analytical Results
MBTA Green Line Extension Project
Washington Street
Somerville, Massachusetts

LOCATION							DUPB		GLX-TPW-606 (1)		GLX-TPW-606 (4)		GLX-TPW-608 (1)		GLX-TPW-608 (4)		GLX-TPW-609 (1) ¹		
SAMPLING DATE							10/20/2019		11/2/2019		11/2/2019		11/2/2019		11/2/2019		11/2/2019		
LAB SAMPLE ID							L1949294-57		L1952035-02		L1952035-04		L1952035-06		L1952035-08		L1952035-10		
SAMPLE TYPE							SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		
SAMPLE DEPTH (ft.)																			
		CasNum	MA-LLAND	MA-ULAND	RCS-1-14	S-1	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry																			
	Solids, Total	NONE					%	92.7		84.8		90.1		88		86.1		92.6	
MCP Volatile Organics by EPA 5035																			
	Methylene chloride	75-09-2			0.1	NS	mg/kg	0.0039	U	0.004	U	0.0024	U	0.0035	U	0.0047	U	0.0034	U
	1,1-Dichloroethane	75-34-3			0.4	0.4	mg/kg	0.00078	U	0.0008	U	0.00048	U	0.00071	U	0.00094	U	0.00069	U
	Chloroform	67-66-3			0.2	0.2	mg/kg	0.0012	U	0.0012	U	0.00072	U	0.0011	U	0.0014	U	0.001	U
	Carbon tetrachloride	56-23-5			5	5	mg/kg	0.00078	U	0.0008	U	0.00048	U	0.00071	U	0.00094	U	0.00069	U
	1,2-Dichloropropane	78-87-5			0.1	0.1	mg/kg	0.00078	U	0.0008	U	0.00048	U	0.00071	U	0.00094	U	0.00069	U
	Dibromochloromethane	124-48-1			0.005	0.005	mg/kg	0.00078	U	0.0008	U	0.00048	U	0.00071	U	0.00094	U	0.00069	U
	1,1,2-Trichloroethane	79-00-5			0.1	0.1	mg/kg	0.00078	U	0.0008	U	0.00048	U	0.00071	U	0.00094	U	0.00069	U
	Tetrachloroethene	127-18-4			1	1	mg/kg	0.00039	U	0.0004	U	0.00024	U	0.00035	U	0.00047	U	0.00034	U
	Chlorobenzene	108-90-7			1	1	mg/kg	0.00039	U	0.0004	U	0.00024	U	0.00035	U	0.00047	U	0.00034	U
	Trichlorofluoromethane	75-69-4			1000	NS	mg/kg	0.0031	U	0.0032	U	0.0019	U	0.0028	U	0.0037	U	0.0027	U
	1,2-Dichloroethane	107-06-2			0.1	0.1	mg/kg	0.00078	U	0.0008	U	0.00048	U	0.00071	U	0.00094	U	0.00069	U
	1,1,1-Trichloroethane	71-55-6			30	30	mg/kg	0.00039	U	0.0004	U	0.00024	U	0.00035	U	0.00047	U	0.00034	U
	Bromodichloromethane	75-27-4			0.1	0.1	mg/kg	0.00039	U	0.0004	U	0.00024	U	0.00035	U	0.00047	U	0.00034	U
	trans-1,3-Dichloropropene	10061-02-6			0.01	NS	mg/kg	0.00078	U	0.0008	U	0.00048	U	0.00071	U	0.00094	U	0.00069	U
	cis-1,3-Dichloropropene	10061-01-5			0.01	NS	mg/kg	0.00039	U	0.0004	U	0.00024	U	0.00035	U	0.00047	U	0.00034	U
	1,3-Dichloropropene, Total	542-75-6			0.01	0.01	mg/kg	0.00039	U	0.0004	U	0.00024	U	0.00035	U	0.00047	U	0.00034	U
	1,1-Dichloropropene	563-58-6				NS	mg/kg	0.00039	U	0.0004	U	0.00024	U	0.00035	U	0.00047	U	0.00034	U
	Bromoform	75-25-2			0.1	0.1	mg/kg	0.0031	U	0.0032	U	0.0019	U	0.0028	U	0.0037	U	0.0027	U
	1,1,1,2-Tetrachloroethane	79-34-5			0.005	0.005	mg/kg	0.00039	U	0.0004	U	0.00024	U	0.00035	U	0.00047	U	0.00034	U
	Benzene	71-43-2			2	2	mg/kg	0.00039	U	0.0004	U	0.00024	U	0.00035	U	0.00047	U	0.00034	U
	Toluene	108-88-3			30	30	mg/kg	0.00078	U	0.0008	U	0.00048	U	0.00071	U	0.00094	U	0.00069	U
	Ethylbenzene	100-41-4			40	40	mg/kg	0.00078	U	0.0008	U	0.00048	U	0.00071	U	0.00094	U	0.00069	U
	Chloromethane	74-87-3			100	NS	mg/kg	0.0031	U	0.0032	U	0.0019	U	0.0028	U	0.0037	U	0.0027	U
	Bromomethane	74-83-9			0.5	0.5	mg/kg	0.0016	U	0.0016	U	0.00096	U	0.0014	U	0.0019	U	0.0014	U
	Vinyl chloride	75-01-4			0.7	0.7	mg/kg	0.00078	U	0.0008	U	0.00048	U	0.00071	U	0.00094	U	0.00069	U
	Chloroethane	75-00-3			100	NS	mg/kg	0.0016	U	0.0016	U	0.00096	U	0.0014	U	0.0019	U	0.0014	U
	1,1-Dichloroethene	75-35-4			3	3	mg/kg	0.00078	U	0.0008	U	0.00048	U	0.00071	U	0.00094	U	0.00069	U
	trans-1,2-Dichloroethene	156-60-5			1	1	mg/kg	0.0012	U	0.0012	U	0.00072	U	0.0011	U	0.0014	U	0.001	U
	Trichloroethene	79-01-6			0.3	0.3	mg/kg	0.00039	U	0.0004	U	0.00024	U	0.00035	U	0.00047	U	0.00034	U
	1,2-Dichlorobenzene	95-50-1			9	9	mg/kg	0.0016	U	0.0016	U	0.00096	U	0.0014	U	0.0019	U	0.0014	U
	1,3-Dichlorobenzene	541-73-1			3	3	mg/kg	0.0016	U	0.0016	U	0.00096	U	0.0014	U	0.0019	U	0.0014	U
	1,4-Dichlorobenzene	106-46-7			0.7	0.7	mg/kg	0.0016	U	0.0016	U	0.00096	U	0.0014	U	0.0019	U	0.0014	U
	Methyl tert butyl ether	1634-04-4			0.1	0.1	mg/kg	0.0016	U	0.0016	U	0.00096	U	0.0014	U	0.0019	U	0.0014	U
	p/m-Xylene	179601-23-1			100	100	mg/kg	0.0016	U	0.0016	U	0.00096	U	0.0014	U	0.0019	U	0.0014	U
	o-Xylene	95-47-6			100	100	mg/kg	0.00078	U	0.0008	U	0.00048	U	0.00071	U	0.00094	U	0.00069	U
	Xylenes, Total	1330-20-7			100	100	mg/kg	0.00078	U	0.0008	U	0.00048	U	0.00071	U	0.00094	U	0.00069	U
	cis-1,2-Dichloroethene	156-59-2			0.1	0.1	mg/kg	0.00078	U	0.0008	U	0.00048	U	0.00071	U	0.00094	U	0.00069	U
	1,2-Dichloroethene, Total	540-59-0				NS	mg/kg	0.00078	U	0.0008	U	0.00048	U	0.00071	U	0.00094	U	0.00069	U
	Dibromomethane	74-95-3			500	NS	mg/kg	0.0016	U	0.0016	U	0.00096	U	0.0014	U	0.0019	U	0.0014	U
	1,2,3-Trichloropropane	96-18-4			100	NS	mg/kg	0.0016	U	0.0016	U	0.00096	U	0.0014	U	0.0019	U	0.0014	U
	Styrene	100-42-5			3	3	mg/kg	0.00078	U	0.0008	U	0.00048	U	0.00071	U	0.00094	U	0.00069	U
	Dichlorodifluoromethane	75-71-8			1000	NS	mg/kg	0.0078	U	0.008	U	0.0048	U	0.0071	U	0.0094	U	0.0069	U
	Acetone	67-64-1			6	6	mg/kg	0.052		0.043		0.016		0.02		0.053		0.07	
	Carbon disulfide	75-15-0			100	NS	mg/kg	0.0078	U	0.008	U	0.0048	U	0.0071	U	0.0094	U	0.0069	U
	Methyl ethyl ketone	78-93-3			4	4	mg/kg	0.0078	U	0.008	U	0.0048	U	0.0071	U	0.0094	U	0.0069	U
	Methyl isobutyl ketone	108-10-1			0.4	0.4	mg/kg	0.0078	U	0.008	U	0.0048	U	0.0071	U	0.0094	U	0.0069	U
	2-Hexanone	591-78-6			100	NS	mg/kg	0.0078	U	0.008	U	0.0048	U	0.0071	U	0.0094	U	0.0069	U
	Bromochloromethane	74-97-5				NS	mg/kg	0.0016	U	0.0016	U	0.00096	U	0.0014	U	0.0019	U	0.0014	U
	Tetrahydrofuran	109-99-9			500	NS	mg/kg	0.0031	U	0.0032	U	0.0019	U	0.0028	U	0.0037	U	0.0027	U

Summary of Phase 2 Soil Sample Analytical Results
MBTA Green Line Extension Project
Washington Street
Somerville, Massachusetts

LOCATION						DUPB		GLX-TPW-606 (1)		GLX-TPW-606 (4)		GLX-TPW-608 (1)		GLX-TPW-608 (4)		GLX-TPW-609 (1) ¹	
SAMPLING DATE						10/20/2019		11/2/2019		11/2/2019		11/2/2019		11/2/2019		11/2/2019	
LAB SAMPLE ID						L1949294-57		L1952035-02		L1952035-04		L1952035-06		L1952035-08		L1952035-10	
SAMPLE TYPE						SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE DEPTH (ft.)																	
		CasNum	MA-LLAND	MA-ULAND	RCS-1-14	S-1	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
MCP Volatile Organics by EPA 5035						NS											
	2,2-Dichloropropane	594-20-7				NS	mg/kg	0.0016	U	0.0016	U	0.00096	U	0.0014	U	0.0019	U
	1,2-Dibromoethane	106-93-4			0.1	NS	mg/kg	0.00078	U	0.0008	U	0.00048	U	0.00071	U	0.00094	U
	1,3-Dichloropropane	142-28-9			500	0.1	mg/kg	0.0016	U	0.0016	U	0.00096	U	0.0014	U	0.0019	U
	1,1,1,2-Tetrachloroethane	630-20-6			0.1	NS	mg/kg	0.00039	U	0.0004	U	0.00024	U	0.00035	U	0.00047	U
	Bromobenzene	108-86-1			100	NS	mg/kg	0.0016	U	0.0016	U	0.00096	U	0.0014	U	0.0019	U
	n-Butylbenzene	104-51-8				NS	mg/kg	0.00078	U	0.0008	U	0.00048	U	0.00071	U	0.00094	U
	sec-Butylbenzene	135-98-8				NS	mg/kg	0.00078	U	0.0008	U	0.00048	U	0.00071	U	0.00094	U
	tert-Butylbenzene	98-06-6			100	NS	mg/kg	0.0016	U	0.0016	U	0.00096	U	0.0014	U	0.0019	U
	o-Chlorotoluene	95-49-8			100	NS	mg/kg	0.0016	U	0.0016	U	0.00096	U	0.0014	U	0.0019	U
	p-Chlorotoluene	106-43-4				NS	mg/kg	0.0016	U	0.0016	U	0.00096	U	0.0014	U	0.0019	U
	1,2-Dibromo-3-chloropropane	96-12-8			10	30	mg/kg	0.0023	U	0.0024	U	0.0014	U	0.0021	U	0.0028	U
	Hexachlorobutadiene	87-68-3			30	NS	mg/kg	0.0031	U	0.0032	U	0.0019	U	0.0028	U	0.0037	U
	Isopropylbenzene	98-82-8			1000		mg/kg	0.00078	U	0.0008	U	0.00048	U	0.00071	U	0.00094	U
	p-Isopropyltoluene	99-87-6			100	NS	mg/kg	0.00078	U	0.0008	U	0.00048	U	0.00071	U	0.00094	U
	Naphthalene	91-20-3			4	4	mg/kg	0.0031	U	0.0032	U	0.0019	U	0.0028	U	0.0037	U
	n-Propylbenzene	103-65-1			100	NS	mg/kg	0.00078	U	0.0008	U	0.00048	U	0.00071	U	0.00094	U
	1,2,3-Trichlorobenzene	87-61-6				NS	mg/kg	0.0016	U	0.0016	U	0.00096	U	0.0014	U	0.0019	U
	1,2,4-Trichlorobenzene	120-82-1			2	2	mg/kg	0.0016	U	0.0016	U	0.00096	U	0.0014	U	0.0019	U
	1,3,5-Trimethylbenzene	108-67-8			10	NS	mg/kg	0.0016	U	0.0016	U	0.00096	U	0.0014	U	0.0019	U
	1,2,4-Trimethylbenzene	95-63-6			1000	NS	mg/kg	0.0016	U	0.0016	U	0.00096	U	0.0014	U	0.0019	U
	Diethyl ether	60-29-7			100	NS	mg/kg	0.0016	U	0.0016	U	0.00096	U	0.0014	U	0.0019	U
	Diisopropyl Ether	108-20-3			100	NS	mg/kg	0.0016	U	0.0016	U	0.00096	U	0.0014	U	0.0019	U
	Ethyl-Tert-Butyl-Ether	637-92-3				NS	mg/kg	0.0016	U	0.0016	U	0.00096	U	0.0014	U	0.0019	U
	Tertiary-Amyl Methyl Ether	994-05-8				NS	mg/kg	0.0016	U	0.0016	U	0.00096	U	0.0014	U	0.0019	U
	1,4-Dioxane	123-91-1			0.2	0.2	mg/kg	0.062	U	0.064	U	0.038	U	0.057	U	0.075	U

Yellow shading indicates detected result is equal to or above one or more of the listed criteria.
Gray shading indicates nondetect detection limit is above one or more of the listed criteria.
Bold typeface indicates detection above metiond detection limit.

MA-LLAND: Lined Landfill Limits current as of August, 1997
MA-ULAND: UnLined Landfill Limits current as of August, 1997
RCS-1-14: MCP 2014 RCS-1 Reportable Concentrations Criteria effective April 25, 2014.
MCP 2014 S-1 Cleanup Criteria effective April 25, 2014; the lowest S-1/GW-X standard is shown.
**EPA-TCLP: EPA Toxicity Characteristic (TCLP) Regulatory Levels Criteria per 40CFR Part 261 as of September 10, 2015.

U - Not detected at the reported detection limit for the sample.
ND - Not detected.
E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
¹ - The laboratory reported two sets of VOC results due to internal standard and/or surrogate nonconformances.
The highest detected results and lowest detection limits have been tabulated. Refer to laboratory report for further detail.
² - The laboratory reported three sets of VOC results due to internal standard and/or surrogate nonconformances.
The highest detected results from the low-level analysis and detection limits from the high-level analysis have been tabulated due to significant internal standard issues with the low-level analysis. Refer to laboratory report for further detail.

Summary of Phase 2 Soil Sample Analytical Results
MBTA Green Line Extension Project
Washington Street
Somerville, Massachusetts

LOCATION							GLX-TPW-609 (4)		GLX-TPW-610 (1) ¹		GLX-TPW-610 (3)		GLX-TPW-610 (7)		GLC-C14(A)-DC-VOC (10)		GLC-C14(B)-DC-VOC (12) ¹		
SAMPLING DATE							11/2/2019		11/2/2019		11/2/2019		11/2/2019		11/2/2019		11/2/2019		
LAB SAMPLE ID							L1952035-12		L1952035-14		L1952035-16		L1952035-18		L1952035-20		L1952035-23		
SAMPLE TYPE							SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		
SAMPLE DEPTH (ft.)																			
		CasNum	MA-LLAND	MA-ULAND	RCS-1-14	S-1	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual		
General Chemistry																			
	Solids, Total	NONE					%	92.7		91.4		96		94.4		80.7		91.2	
MCP Volatile Organics by EPA 5035																			
	Methylene chloride	75-09-2			0.1	NS	mg/kg	0.0032	U	0.0038	U	0.0024	U	0.003	U	0.0037	U	0.0026	U
	1,1-Dichloroethane	75-34-3			0.4	0.4	mg/kg	0.00064	U	0.00076	U	0.00048	U	0.00061	U	0.00074	U	0.00052	U
	Chloroform	67-66-3			0.2	0.2	mg/kg	0.00096	U	0.0011	U	0.00071	U	0.00091	U	0.0011	U	0.00078	U
	Carbon tetrachloride	56-23-5			5	5	mg/kg	0.00064	U	0.00076	U	0.00048	U	0.00061	U	0.00074	U	0.00052	U
	1,2-Dichloropropane	78-87-5			0.1	0.1	mg/kg	0.00064	U	0.00076	U	0.00048	U	0.00061	U	0.00074	U	0.00052	U
	Dibromochloromethane	124-48-1			0.005	0.005	mg/kg	0.00064	U	0.00076	U	0.00048	U	0.00061	U	0.00074	U	0.00052	U
	1,1,2-Trichloroethane	79-00-5			0.1	0.1	mg/kg	0.00064	U	0.00076	U	0.00048	U	0.00061	U	0.00074	U	0.00052	U
	Tetrachloroethene	127-18-4			1	1	mg/kg	0.00032	U	0.00038	U	0.00024	U	0.0003	U	0.00037	U	0.00026	U
	Chlorobenzene	108-90-7			1	1	mg/kg	0.00032	U	0.00038	U	0.00024	U	0.0003	U	0.00037	U	0.00026	U
	Trichlorofluoromethane	75-69-4			1000	NS	mg/kg	0.0026	U	0.003	U	0.0019	U	0.0024	U	0.003	U	0.0021	U
	1,2-Dichloroethane	107-06-2			0.1	0.1	mg/kg	0.00064	U	0.00076	U	0.00048	U	0.00061	U	0.00074	U	0.00052	U
	1,1,1-Trichloroethane	71-55-6			30	30	mg/kg	0.00032	U	0.00038	U	0.00024	U	0.0003	U	0.00037	U	0.00026	U
	Bromodichloromethane	75-27-4			0.1	0.1	mg/kg	0.00032	U	0.00038	U	0.00024	U	0.0003	U	0.00037	U	0.00026	U
	trans-1,3-Dichloropropene	10061-02-6			0.01	NS	mg/kg	0.00064	U	0.00076	U	0.00048	U	0.00061	U	0.00074	U	0.00052	U
	cis-1,3-Dichloropropene	10061-01-5			0.01	NS	mg/kg	0.00032	U	0.00038	U	0.00024	U	0.0003	U	0.00037	U	0.00026	U
	1,3-Dichloropropene, Total	542-75-6			0.01	0.01	mg/kg	0.00032	U	0.00038	U	0.00024	U	0.0003	U	0.00037	U	0.00026	U
	1,1-Dichloropropene	563-58-6				NS	mg/kg	0.00032	U	0.00038	U	0.00024	U	0.0003	U	0.00037	U	0.00026	U
	Bromoform	75-25-2			0.1	0.1	mg/kg	0.0026	U	0.003	U	0.0019	U	0.0024	U	0.003	U	0.0021	U
	1,1,1,2,2-Tetrachloroethane	79-34-5			0.005	0.005	mg/kg	0.00032	U	0.00038	U	0.00024	U	0.0003	U	0.00037	U	0.00026	U
	Benzene	71-43-2			2	2	mg/kg	0.00032	U	0.00038	U	0.00024	U	0.0003	U	0.00037	U	0.00026	U
	Toluene	108-88-3			30	30	mg/kg	0.00064	U	0.00076	U	0.00048	U	0.00061	U	0.00074	U	0.00052	U
	Ethylbenzene	100-41-4			40	40	mg/kg	0.00064	U	0.00076	U	0.00048	U	0.00061	U	0.00074	U	0.00052	U
	Chloromethane	74-87-3			100	NS	mg/kg	0.0026	U	0.003	U	0.0019	U	0.0024	U	0.003	U	0.0021	U
	Bromomethane	74-83-9			0.5	0.5	mg/kg	0.0013	U	0.0015	U	0.00095	U	0.0012	U	0.0015	U	0.001	U
	Vinyl chloride	75-01-4			0.7	0.7	mg/kg	0.00064	U	0.00076	U	0.00048	U	0.00061	U	0.00074	U	0.00052	U
	Chloroethane	75-00-3			100	NS	mg/kg	0.0013	U	0.0015	U	0.00095	U	0.0012	U	0.0015	U	0.001	U
	1,1-Dichloroethene	75-35-4			3	3	mg/kg	0.00064	U	0.00076	U	0.00048	U	0.00061	U	0.00074	U	0.00052	U
	trans-1,2-Dichloroethene	156-60-5			1	1	mg/kg	0.00096	U	0.0011	U	0.00071	U	0.00091	U	0.0011	U	0.00078	U
	Trichloroethene	79-01-6			0.3	0.3	mg/kg	0.00032	U	0.00038	U	0.00024	U	0.0003	U	0.00037	U	0.00026	U
	1,2-Dichlorobenzene	95-50-1			9	9	mg/kg	0.0013	U	0.0015	U	0.00095	U	0.0012	U	0.0015	U	0.001	U
	1,3-Dichlorobenzene	541-73-1			3	3	mg/kg	0.0013	U	0.0015	U	0.00095	U	0.0012	U	0.0015	U	0.001	U
	1,4-Dichlorobenzene	106-46-7			0.7	0.7	mg/kg	0.0013	U	0.0015	U	0.00095	U	0.0012	U	0.0015	U	0.001	U
	Methyl tert butyl ether	1634-04-4			0.1	0.1	mg/kg	0.0013	U	0.0015	U	0.00095	U	0.0012	U	0.0015	U	0.001	U
	p/m-Xylene	179601-23-1			100	100	mg/kg	0.0013	U	0.0015	U	0.00095	U	0.0012	U	0.0015	U	0.001	U
	o-Xylene	95-47-6			100	100	mg/kg	0.00064	U	0.00076	U	0.00048	U	0.00061	U	0.00074	U	0.00052	U
	Xylenes, Total	1330-20-7			100	100	mg/kg	0.00064	U	0.00076	U	0.00048	U	0.00061	U	0.00074	U	0.00052	U
	cis-1,2-Dichloroethene	156-59-2			0.1	0.1	mg/kg	0.00064	U	0.00076	U	0.00048	U	0.00061	U	0.00074	U	0.00052	U
	1,2-Dichloroethene, Total	540-59-0				NS	mg/kg	0.00064	U	0.00076	U	0.00048	U	0.00061	U	0.00074	U	0.00052	U
	Dibromomethane	74-95-3			500	NS	mg/kg	0.0013	U	0.0015	U	0.00095	U	0.0012	U	0.0015	U	0.001	U
	1,2,3-Trichloropropane	96-18-4			100	NS	mg/kg	0.0013	U	0.0015	U	0.00095	U	0.0012	U	0.0015	U	0.001	U
	Styrene	100-42-5			3	3	mg/kg	0.00064	U	0.00076	U	0.00048	U	0.00061	U	0.00074	U	0.00052	U
	Dichlorodifluoromethane	75-71-8			1000	NS	mg/kg	0.0064	U	0.0076	U	0.0048	U	0.0061	U	0.0074	U	0.0052	U
	Acetone	67-64-1			6	6	mg/kg	0.092		0.18		0.018		0.035		0.018	U	0.013	U
	Carbon disulfide	75-15-0			100	NS	mg/kg	0.0064	U	0.0076	U	0.0048	U	0.0061	U	0.0074	U	0.0052	U
	Methyl ethyl ketone	78-93-3			4	4	mg/kg	0.0064	U	0.018		0.0048	U	0.0061	U	0.0074	U	0.0052	U
	Methyl isobutyl ketone	108-10-1			0.4	0.4	mg/kg	0.0064	U	0.0076	U	0.0048	U	0.0061	U	0.0074	U	0.0052	U
	2-Hexanone	591-78-6			100	NS	mg/kg	0.0064	U	0.0076	U	0.0048	U	0.0061	U	0.0074	U	0.0052	U
	Bromochloromethane	74-97-5				NS	mg/kg	0.0013	U	0.0015	U	0.00095	U	0.0012	U	0.0015	U	0.001	U
	Tetrahydrofuran	109-99-9			500	NS	mg/kg	0.0026	U	0.003	U	0.0019	U	0.0024	U	0.003	U	0.0021	U

Summary of Phase 2 Soil Sample Analytical Results
MBTA Green Line Extension Project
Washington Street
Somerville, Massachusetts

LOCATION							GLX-TPW-609 (4)		GLX-TPW-610 (1) ¹		GLX-TPW-610 (3)		GLX-TPW-610 (7)		GLC-C14(A)-DC-VOC (10)		GLC-C14(B)-DC-VOC (12) ¹		
SAMPLING DATE							11/2/2019		11/2/2019		11/2/2019		11/2/2019		11/2/2019		11/2/2019		
LAB SAMPLE ID							L1952035-12		L1952035-14		L1952035-16		L1952035-18		L1952035-20		L1952035-23		
SAMPLE TYPE							SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		
SAMPLE DEPTH (ft.)																			
		CasNum	MA-LLAND	MA-ULAND	RCS-1-14	S-1	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
MCP Volatile Organics by EPA 5035							NS												
	2,2-Dichloropropane	594-20-7				NS	mg/kg	0.0013	U	0.0015	U	0.00095	U	0.0012	U	0.0015	U	0.001	U
	1,2-Dibromoethane	106-93-4			0.1	NS	mg/kg	0.00064	U	0.00076	U	0.00048	U	0.00061	U	0.00074	U	0.00052	U
	1,3-Dichloropropane	142-28-9			500	0.1	mg/kg	0.0013	U	0.0015	U	0.00095	U	0.0012	U	0.0015	U	0.001	U
	1,1,1,2-Tetrachloroethane	630-20-6			0.1	NS	mg/kg	0.00032	U	0.00038	U	0.00024	U	0.0003	U	0.00037	U	0.00026	U
	Bromobenzene	108-86-1			100	NS	mg/kg	0.0013	U	0.0015	U	0.00095	U	0.0012	U	0.0015	U	0.001	U
	n-Butylbenzene	104-51-8				NS	mg/kg	0.00064	U	0.00076	U	0.00048	U	0.00061	U	0.00074	U	0.00052	U
	sec-Butylbenzene	135-98-8				NS	mg/kg	0.00064	U	0.00076	U	0.00048	U	0.00061	U	0.00074	U	0.00052	U
	tert-Butylbenzene	98-06-6			100	NS	mg/kg	0.0013	U	0.0015	U	0.00095	U	0.0012	U	0.0015	U	0.001	U
	o-Chlorotoluene	95-49-8			100	NS	mg/kg	0.0013	U	0.0015	U	0.00095	U	0.0012	U	0.0015	U	0.001	U
	p-Chlorotoluene	106-43-4				NS	mg/kg	0.0013	U	0.0015	U	0.00095	U	0.0012	U	0.0015	U	0.001	U
	1,2-Dibromo-3-chloropropane	96-12-8			10	30	mg/kg	0.0019	U	0.0023	U	0.0014	U	0.0018	U	0.0022	U	0.0016	U
	Hexachlorobutadiene	87-68-3			30	NS	mg/kg	0.0026	U	0.003	U	0.0019	U	0.0024	U	0.003	U	0.0021	U
	Isopropylbenzene	98-82-8			1000		mg/kg	0.00064	U	0.00076	U	0.00048	U	0.00061	U	0.00074	U	0.00052	U
	p-Isopropyltoluene	99-87-6			100	NS	mg/kg	0.00064	U	0.00076	U	0.00048	U	0.00061	U	0.00074	U	0.00052	U
	Naphthalene	91-20-3			4	4	mg/kg	0.0026	U	0.003	U	0.0019	U	0.0024	U	0.003	U	0.0021	U
	n-Propylbenzene	103-65-1			100	NS	mg/kg	0.00064	U	0.00076	U	0.00048	U	0.00061	U	0.00074	U	0.00052	U
	1,2,3-Trichlorobenzene	87-61-6				NS	mg/kg	0.0013	U	0.0015	U	0.00095	U	0.0012	U	0.0015	U	0.001	U
	1,2,4-Trichlorobenzene	120-82-1			2	2	mg/kg	0.0013	U	0.0015	U	0.00095	U	0.0012	U	0.0015	U	0.001	U
	1,3,5-Trimethylbenzene	108-67-8			10	NS	mg/kg	0.0013	U	0.0015	U	0.00095	U	0.0012	U	0.0015	U	0.001	U
	1,2,4-Trimethylbenzene	95-63-6			1000	NS	mg/kg	0.0013	U	0.0015	U	0.00095	U	0.0012	U	0.0015	U	0.001	U
	Diethyl ether	60-29-7			100	NS	mg/kg	0.0013	U	0.0015	U	0.00095	U	0.0012	U	0.0015	U	0.001	U
	Diisopropyl Ether	108-20-3			100	NS	mg/kg	0.0013	U	0.0015	U	0.00095	U	0.0012	U	0.0015	U	0.001	U
	Ethyl-Tert-Butyl-Ether	637-92-3				NS	mg/kg	0.0013	U	0.0015	U	0.00095	U	0.0012	U	0.0015	U	0.001	U
	Tertiary-Amyl Methyl Ether	994-05-8				NS	mg/kg	0.0013	U	0.0015	U	0.00095	U	0.0012	U	0.0015	U	0.001	U
	1,4-Dioxane	123-91-1			0.2	0.2	mg/kg	0.051	U	0.061	U	0.038	U	0.049	U	0.059	U	0.042	U

Yellow shading indicates detected result is equal to or above one or more of the listed criteria.
Gray shading indicates nondetect detection limit is above one or more of the listed criteria.
Bold typeface indicates detection above metiond detection limit.

MA-LLAND: Lined Landfill Limits current as of August, 1997
MA-ULAND: UnLined Landfill Limits current as of August, 1997
RCS-1-14: MCP 2014 RCS-1 Reportable Concentrations Criteria effective April 25, 2014.
MCP 2014 S-1 Cleanup Criteria effective April 25, 2014; the lowest S-1/GW-X standard is shown.
**EPA-TCLP: EPA Toxicity Characteristic (TCLP) Regulatory Levels Criteria per 40CFR Part 261 as of September 10, 2015.

U - Not detected at the reported detection limit for the sample.
ND - Not detected.
E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
¹ - The laboratory reported two sets of VOC results due to internal standard and/or surrogate nonconformances.
The highest detected results and lowest detection limits have been tabulated. Refer to laboratory report for further detail.
² - The laboratory reported three sets of VOC results due to internal standard and/or surrogate nonconformances.
The highest detected results from the low-level analysis and detection limits from the high-level analysis have been tabulated due to significant internal standard issues with the low-level analysis. Refer to laboratory report for further detail.

Summary of Phase 2 Soil Sample Analytical Results
MBTA Green Line Extension Project
Washington Street
Somerville, Massachusetts

LOCATION							GLC-C13(A)-DC-VOC (9) ¹		GLC-C13(B)-DC-VOC (9) ²		GLX-TPW-403-VOC (3')		GLX-TPW-401-VOC (3')		GLX-TPW-402-VOC (4')	
SAMPLING DATE							11/2/2019		11/2/2019		11/6/2019		11/6/2019		11/6/2019	
LAB SAMPLE ID							L1952035-25		L1952035-27		L1952792-04		L1952792-05		L1952792-06	
SAMPLE TYPE							SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE DEPTH (ft.)																
	CasNum	MA-LLAND	MA-ULAND	RCS-1-14	S-1	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry																
Solids, Total	NONE					%	82.9		86.6		88.1		90.6		84.9	
MCP Volatile Organics by EPA 5035																
Methylene chloride	75-09-2			0.1	NS	mg/kg	0.0051	U	0.3	U	0.0089	U	0.33	U	0.3	U
1,1-Dichloroethane	75-34-3			0.4	0.4	mg/kg	0.001	U	0.06	U	0.0018	U	0.065	U	0.06	U
Chloroform	67-66-3			0.2	0.2	mg/kg	0.0015	U	0.091	U	0.0027	U	0.098	U	0.09	U
Carbon tetrachloride	56-23-5			5	5	mg/kg	0.001	U	0.06	U	0.0018	U	0.065	U	0.06	U
1,2-Dichloropropane	78-87-5			0.1	0.1	mg/kg	0.001	U	0.06	U	0.0018	U	0.065	U	0.06	U
Dibromochloromethane	124-48-1			0.005	0.005	mg/kg	0.001	U	0.06	U	0.0018	U	0.065	U	0.06	U
1,1,2-Trichloroethane	79-00-5			0.1	0.1	mg/kg	0.001	U	0.06	U	0.0018	U	0.065	U	0.06	U
Tetrachloroethene	127-18-4			1	1	mg/kg	0.00051	U	0.03	U	0.00089	U	0.041		2	
Chlorobenzene	108-90-7			1	1	mg/kg	0.00051	U	0.03	U	0.00089	U	0.033	U	0.03	U
Trichlorofluoromethane	75-69-4			1000	NS	mg/kg	0.0041	U	0.24	U	0.0071	U	0.26	U	0.24	U
1,2-Dichloroethane	107-06-2			0.1	0.1	mg/kg	0.001	U	0.06	U	0.0018	U	0.065	U	0.06	U
1,1,1-Trichloroethane	71-55-6			30	30	mg/kg	0.00051	U	0.03	U	0.00089	U	0.033	U	0.03	U
Bromodichloromethane	75-27-4			0.1	0.1	mg/kg	0.00051	U	0.03	U	0.00089	U	0.033	U	0.03	U
trans-1,3-Dichloropropene	10061-02-6			0.01	NS	mg/kg	0.001	U	0.06	U	0.0018	U	0.065	U	0.06	U
cis-1,3-Dichloropropene	10061-01-5			0.01	NS	mg/kg	0.00051	U	0.03	U	0.00089	U	0.033	U	0.03	U
1,3-Dichloropropene, Total	542-75-6			0.01	0.01	mg/kg	0.00051	U	0.03	U	0.00089	U	0.033	U	0.03	U
1,1-Dichloropropene	563-58-6				NS	mg/kg	0.00051	U	0.03	U	0.00089	U	0.033	U	0.03	U
Bromoform	75-25-2			0.1	0.1	mg/kg	0.0041	U	0.24	U	0.0071	U	0.26	U	0.24	U
1,1,1,2-Tetrachloroethane	79-34-5			0.005	0.005	mg/kg	0.00051	U	0.03	U	0.00089	U	0.033	U	0.03	U
Benzene	71-43-2			2	2	mg/kg	0.00051	U	0.03	U	0.00089	U	0.033	U	0.03	U
Toluene	108-88-3			30	30	mg/kg	0.001	U	0.06	U	0.0018	U	0.065	U	0.06	U
Ethylbenzene	100-41-4			40	40	mg/kg	0.001	U	0.06	U	0.0018	U	0.065	U	0.06	U
Chloromethane	74-87-3			100	NS	mg/kg	0.0041	U	0.24	U	0.0071	U	0.26	U	0.24	U
Bromomethane	74-83-9			0.5	0.5	mg/kg	0.002	U	0.12	U	0.0036	U	0.13	U	0.12	U
Vinyl chloride	75-01-4			0.7	0.7	mg/kg	0.001	U	0.06	U	0.0023		0.065	U	0.06	U
Chloroethane	75-00-3			100	NS	mg/kg	0.002	U	0.12	U	0.0036	U	0.13	U	0.12	U
1,1-Dichloroethene	75-35-4			3	3	mg/kg	0.001	U	0.06	U	0.0018	U	0.065	U	0.06	U
trans-1,2-Dichloroethene	156-60-5			1	1	mg/kg	0.0015	U	0.091	U	0.0027	U	0.098	U	0.09	U
Trichloroethene	79-01-6			0.3	0.3	mg/kg	0.00051	U	0.03	U	0.00089	U	0.033	U	0.032	
1,2-Dichlorobenzene	95-50-1			9	9	mg/kg	0.002	U	0.12	U	0.0036	U	0.13	U	0.12	U
1,3-Dichlorobenzene	541-73-1			3	3	mg/kg	0.002	U	0.12	U	0.0036	U	0.13	U	0.12	U
1,4-Dichlorobenzene	106-46-7			0.7	0.7	mg/kg	0.002	U	0.12	U	0.0036	U	0.13	U	0.12	U
Methyl tert butyl ether	1634-04-4			0.1	0.1	mg/kg	0.002	U	0.12	U	0.0036	U	0.13	U	0.12	U
p/m-Xylene	179601-23-1			100	100	mg/kg	0.002	U	0.12	U	0.0036	U	0.13	U	0.12	U
o-Xylene	95-47-6			100	100	mg/kg	0.001	U	0.06	U	0.0018	U	0.065	U	0.06	U
Xylenes, Total	1330-20-7			100	100	mg/kg	0.001	U	0.06	U	0.0018	U	0.065	U	0.06	U
cis-1,2-Dichloroethene	156-59-2			0.1	0.1	mg/kg	0.001	U	0.06	U	0.0037		0.065	U	0.06	U
1,2-Dichloroethene, Total	540-59-0				NS	mg/kg	0.001	U	0.06	U	0.0037		0.065	U	0.06	U
Dibromomethane	74-95-3			500	NS	mg/kg	0.002	U	0.12	U	0.0036	U	0.13	U	0.12	U
1,2,3-Trichloropropane	96-18-4			100	NS	mg/kg	0.002	U	0.12	U	0.0036	U	0.13	U	0.12	U
Styrene	100-42-5			3	3	mg/kg	0.001	U	0.06	U	0.0018	U	0.065	U	0.06	U
Dichlorodifluoromethane	75-71-8			1000	NS	mg/kg	0.01	U	0.6	U	0.018	U	0.65	U	0.6	U
Acetone	67-64-1			6	6	mg/kg	0.49	E	0.16		0.044	U	0.65	U	0.6	U
Carbon disulfide	75-15-0			100	NS	mg/kg	0.01	U	0.6	U	0.018	U	0.65	U	0.6	U
Methyl ethyl ketone	78-93-3			4	4	mg/kg	0.01	U	0.6	U	0.018	U	0.65	U	0.6	U
Methyl isobutyl ketone	108-10-1			0.4	0.4	mg/kg	0.01	U	0.6	U	0.018	U	0.65	U	0.6	U
2-Hexanone	591-78-6			100	NS	mg/kg	0.01	U	0.6	U	0.018	U	0.65	U	0.6	U
Bromochloromethane	74-97-5				NS	mg/kg	0.002	U	0.12	U	0.0036	U	0.13	U	0.12	U
Tetrahydrofuran	109-99-9			500	NS	mg/kg	0.0041	U	0.24	U	0.0071	U	0.26	U	0.24	U

Summary of Phase 2 Soil Sample Analytical Results
MBTA Green Line Extension Project
Washington Street
Somerville, Massachusetts

LOCATION							GLC-C13(A)-DC-VOC (9) ¹			GLC-C13(B)-DC-VOC (9) ²		GLX-TPW-403-VOC (3')		GLX-TPW-401-VOC (3')		GLX-TPW-402-VOC (4')	
SAMPLING DATE							11/2/2019			11/2/2019		11/6/2019		11/6/2019		11/6/2019	
LAB SAMPLE ID							L1952035-25			L1952035-27		L1952792-04		L1952792-05		L1952792-06	
SAMPLE TYPE							SOIL			SOIL		SOIL		SOIL		SOIL	
SAMPLE DEPTH (ft.)																	
	CasNum	MA-LLAND	MA-ULAND	RCS-1-14	S-1	Units	Results	Qual		Results	Qual	Results	Qual	Results	Qual	Results	Qual
MCP Volatile Organics by EPA 5035							NS										
	2,2-Dichloropropane	594-20-7			NS	mg/kg	0.002	U		0.12	U	0.0036	U	0.13	U	0.12	U
	1,2-Dibromoethane	106-93-4		0.1	NS	mg/kg	0.001	U		0.06	U	0.0018	U	0.065	U	0.06	U
	1,3-Dichloropropane	142-28-9		500	0.1	mg/kg	0.002	U		0.12	U	0.0036	U	0.13	U	0.12	U
	1,1,1,2-Tetrachloroethane	630-20-6		0.1	NS	mg/kg	0.00051	U		0.03	U	0.00089	U	0.033	U	0.03	U
	Bromobenzene	108-86-1		100	NS	mg/kg	0.002	U		0.12	U	0.0036	U	0.13	U	0.12	U
	n-Butylbenzene	104-51-8			NS	mg/kg	0.001	U		0.06	U	0.0018	U	0.065	U	0.06	U
	sec-Butylbenzene	135-98-8			NS	mg/kg	0.001	U		0.06	U	0.0018	U	0.065	U	0.06	U
	tert-Butylbenzene	98-06-6		100	NS	mg/kg	0.002	U		0.12	U	0.0036	U	0.13	U	0.12	U
	o-Chlorotoluene	95-49-8		100	NS	mg/kg	0.002	U		0.12	U	0.0036	U	0.13	U	0.12	U
	p-Chlorotoluene	106-43-4			NS	mg/kg	0.002	U		0.12	U	0.0036	U	0.13	U	0.12	U
	1,2-Dibromo-3-chloropropane	96-12-8		10	30	mg/kg	0.0031	U		0.18	U	0.0053	U	0.2	U	0.18	U
	Hexachlorobutadiene	87-68-3		30	NS	mg/kg	0.0041	U		0.24	U	0.0071	U	0.26	U	0.24	U
	Isopropylbenzene	98-82-8		1000		mg/kg	0.001	U		0.06	U	0.0018	U	0.065	U	0.06	U
	p-Isopropyltoluene	99-87-6		100	NS	mg/kg	0.001	U		0.06	U	0.0018	U	0.065	U	0.06	U
	Naphthalene	91-20-3		4	4	mg/kg	0.0041	U		0.24	U	0.0071	U	0.26	U	0.24	U
	n-Propylbenzene	103-65-1		100	NS	mg/kg	0.001	U		0.06	U	0.0018	U	0.065	U	0.06	U
	1,2,3-Trichlorobenzene	87-61-6			NS	mg/kg	0.002	U		0.12	U	0.0036	U	0.13	U	0.12	U
	1,2,4-Trichlorobenzene	120-82-1		2	2	mg/kg	0.002	U		0.12	U	0.0036	U	0.13	U	0.12	U
	1,3,5-Trimethylbenzene	108-67-8		10	NS	mg/kg	0.002	U		0.12	U	0.0036	U	0.13	U	0.12	U
	1,2,4-Trimethylbenzene	95-63-6		1000	NS	mg/kg	0.002	U		0.12	U	0.0036	U	0.13	U	0.12	U
	Diethyl ether	60-29-7		100	NS	mg/kg	0.002	U		0.12	U	0.0036	U	0.13	U	0.12	U
	Diisopropyl Ether	108-20-3		100	NS	mg/kg	0.002	U		0.12	U	0.0036	U	0.13	U	0.12	U
	Ethyl-Tert-Butyl-Ether	637-92-3			NS	mg/kg	0.002	U		0.12	U	0.0036	U	0.13	U	0.12	U
	Tertiary-Amyl Methyl Ether	994-05-8			NS	mg/kg	0.002	U		0.12	U	0.0036	U	0.13	U	0.12	U
	1,4-Dioxane	123-91-1		0.2	0.2	mg/kg	0.082	U		4.8	U	0.14	U	5.2	U	4.8	U

Yellow shading indicates detected result is equal to or above one or more of the listed criteria.
Gray shading indicates nondetect detection limit is above one or more of the listed criteria.
Bold typeface indicates detection above metiond detection limit.

MA-LLAND: Lined Landfill Limits current as of August, 1997
MA-ULAND: UnLined Landfill Limits current as of August, 1997
RCS-1-14: MCP 2014 RCS-1 Reportable Concentrations Criteria effective April 25, 2014.
MCP 2014 S-1 Cleanup Criteria effective April 25, 2014; the lowest S-1/GW-X standard is shown.
**EPA-TCLP: EPA Toxicity Characteristic (TCLP) Regulatory Levels Criteria per 40CFR Part 261 as of September 10, 2015.

U - Not detected at the reported detection limit for the sample.
ND - Not detected.
E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
¹ - The laboratory reported two sets of VOC results due to internal standard and/or surrogate nonconformances.
The highest detected results and lowest detection limits have been tabulated. Refer to laboratory report for further detail.
² - The laboratory reported three sets of VOC results due to internal standard and/or surrogate nonconformances.
The highest detected results from the low-level analysis and detection limits from the high-level analysis have been tabulated due to significant internal standard issues with the low-level analysis. Refer to laboratory report for further detail.

TABLE 2
Additional Characterization Soil Analytical Results
Green Line Extension Project - Washington Street
Somerville, Massachusetts

Sample Location: Sample Depth: Sample Date:						GLC-WASH(A)		GLC-WASH(B)		GLX-TPW-401		GLX-TPW-401A		GLX-TPW-402		GLX-TPW-402A		GLX-TPW-403		GLX-TPW-403A		GLX-TPW-404		GLX-TPW-405		GLX-TPW-406				GLX-TPW-407		GLX-TPW-408	
						N/A		N/A		0-3/3 ft		0-1 ft		0-6/4 ft		0-4 ft		0-3/3 ft		0-3 ft		0-3/2 ft		0-3/2 ft		0-2/1 ft		1 ft		0-5/3 ft		0-4/3 ft	
						02/25/2020		02/25/2020		11/06/2019		03/01/2020		11/06/2019		03/09/2020		11/06/2019		03/01/2020		02/25/2020		02/25/2020		02/26/2020		02/26/2020		02/26/2020		02/26/2020	
Analysis	Analyte	Sample Location:	RCS-1	Unlined Landfill**	Lined Landfill**																					Low VOC		High VOC					
VOCs																																	
	Methylene chloride	mg/kg	0.1	NS	NS	NA		NA		0.33	U	NA		0.3	U	NA		0.0089	U	NA		0.0036	U	0.0037	U	0.0040	U	0.22	U	0.0030	U	0.0045	U
	1,1-Dichloroethane	mg/kg	0.4	NS	NS	NA		NA		0.065	U	NA		0.06	U	NA		0.0018	U	NA		0.00071	U	0.00073	U	0.00080	U	0.044	U	0.00060	U	0.00090	U
	Chloroform	mg/kg	0.2	NS	NS	NA		NA		0.098	U	NA		0.09	U	NA		0.0027	U	NA		0.0011	U	0.0011	U	0.0012	U	0.066	U	0.00091	U	0.0014	U
	Carbon tetrachloride	mg/kg	5	NS	NS	NA		NA		0.065	U	NA		0.06	U	NA		0.0018	U	NA		0.00071	U	0.00073	U	0.00080	U	0.044	U	0.00060	U	0.00090	U
	1,2-Dichloropropane	mg/kg	0.1	NS	NS	NA		NA		0.065	U	NA		0.06	U	NA		0.0018	U	NA		0.00071	U	0.00073	U	0.00080	U	0.044	U	0.00060	U	0.00090	U
	Dibromochloromethane	mg/kg	0.005	NS	NS	NA		NA		0.065	U	NA		0.06	U	NA		0.0018	U	NA		0.00071	U	0.00073	U	0.00080	U	0.044	U	0.00060	U	0.00090	U
	1,1,2-Trichloroethane	mg/kg	0.1	NS	NS	NA		NA		0.065	U	NA		0.06	U	NA		0.0018	U	NA		0.00071	U	0.00073	U	0.00080	U	0.044	U	0.00060	U	0.00090	U
	Tetrachloroethene	mg/kg	1	NS	NS	NA		NA		0.041		NA		2		NA		0.00089	U	NA		0.012		0.0011		0.013		0.14		0.0096		0.14	
	Chlorobenzene	mg/kg	1	NS	NS	NA		NA		0.033	U	NA		0.03	U	NA		0.00089	U	NA		0.00036	U	0.00037	U	0.00040	U	0.022	U	0.00030	U	0.00045	U
	Trichlorofluoromethane	mg/kg	1,000	NS	NS	NA		NA		0.26	U	NA		0.24	U	NA		0.0071	U	NA		0.0028	U	0.0029	U	0.0032	U	0.18	U	0.0024	U	0.0036	U
	1,2-Dichloroethane	mg/kg	0.1	NS	NS	NA		NA		0.065	U	NA		0.06	U	NA		0.0018	U	NA		0.00071	U	0.00073	U	0.00080	U	0.044	U	0.00060	U	0.00090	U
	1,1,1-Trichloroethane	mg/kg	30	NS	NS	NA		NA		0.033	U	NA		0.03	U	NA		0.00089	U	NA		0.00036	U	0.00037	U	0.00040	U	0.022	U	0.00030	U	0.0018	
	Bromodichloromethane	mg/kg	0.1	NS	NS	NA		NA		0.033	U	NA		0.03	U	NA		0.00089	U	NA		0.00036	U	0.00037	U	0.00040	U	0.022	U	0.00030	U	0.00045	U
	trans-1,3-Dichloropropene	mg/kg	0.01	NS	NS	NA		NA		0.065	U	NA		0.06	U	NA		0.0018	U	NA		0.00071	U	0.00073	U	0.00080	U	0.044	U	0.00060	U	0.00090	U
	cis-1,3-Dichloropropene	mg/kg	0.01	NS	NS	NA		NA		0.033	U	NA		0.03	U	NA		0.00089	U	NA		0.00036	U	0.00037	U	0.00040	U	0.022	U	0.00030	U	0.00045	U
	1,3-Dichloropropene, Total	mg/kg	0.01	NS	NS	NA		NA		0.033	U	NA		0.03	U	NA		0.00089	U	NA		0.00036	U	0.00037	U	0.00040	U	0.022	U	0.00030	U	0.00045	U
	1,1-Dichloropropene	mg/kg	0.01	NS	NS	NA		NA		0.033	U	NA		0.03	U	NA		0.00089	U	NA		0.00036	U	0.00037	U	0.00040	U	0.022	U	0.00030	U	0.00045	U
	Bromoform	mg/kg	0.1	NS	NS	NA		NA		0.26	U	NA		0.24	U	NA		0.0071	U	NA		0.0028	U	0.0029	U	0.0032	U	0.18	U	0.0024	U	0.0036	U
	1,1,2,2-Tetrachloroethane	mg/kg	0.005	NS	NS	NA		NA		0.033	U	NA		0.03	U	NA		0.00089	U	NA		0.00036	U	0.00037	U	0.00040	U	0.022	U	0.00030	U	0.00045	U
	Benzene	mg/kg	2	NS	NS	NA		NA		0.033	U	NA		0.03	U	NA		0.00089	U	NA		0.00036	U	0.00037	U	0.00040	U	0.022	U	0.00030	U	0.021	
	Toluene	mg/kg	30	NS	NS	NA		NA		0.065	U	NA		0.06	U	NA		0.0018	U	NA		0.00071	U	0.00073	U	0.0011		0.044	U	0.00060	U	0.00090	U
	Ethylbenzene	mg/kg	40	NS	NS	NA		NA		0.065	U	NA		0.06	U	NA		0.0018	U	NA		0.00071	U	0.00073	U	0.00080	U	0.044	U	0.00060	U	0.00090	U
	Chloromethane	mg/kg	100	NS	NS	NA		NA		0.26	U	NA		0.24	U	NA		0.0071	U	NA		0.0028	U	0.0029	U	0.0032	U	0.18	U	0.0024	U	0.0036	U
	Bromomethane	mg/kg	0.5	NS	NS	NA		NA		0.13	U	NA		0.12	U	NA		0.0036	U	NA		0.0014	U	0.0015	U	0.0016	U	0.088	U	0.0012	U	0.0018	U
	Vinyl chloride	mg/kg	0.7	NS	NS	NA		NA		0.065	U	NA		0.06	U	NA		0.0023		NA		0.00071	U	0.00073	U	0.00080	U	0.044	U	0.00060	U	0.00090	U
	Chloroethane	mg/kg	100	NS	NS	NA		NA		0.13	U	NA		0.12	U	NA		0.0036	U	NA		0.0014	U	0.0015	U	0.0016	U	0.088	U	0.0012	U	0.0018	U
	1,1-Dichloroethene	mg/kg	3	NS	NS	NA		NA		0.065	U	NA		0.06	U	NA		0.0018	U	NA		0.00071	U	0.00073	U	0.00080	U	0.044	U	0.00060	U	0.00090	U
	trans-1,2-Dichloroethene	mg/kg	1	NS	NS	NA		NA		0.098	U	NA		0.09	U	NA		0.0027	U	NA		0.0011	U	0.0011	U	0.0012	U	0.066	U	0.00091	U	0.0014	U
	Trichloroethene	mg/kg	0.3	NS	NS	NA		NA		0.033	U	NA		0.032		NA		0.00089	U	NA		0.00050		0.00037	U	0.0011		0.022	U	0.00083		0.014	
	1,2-Dichlorobenzene	mg/kg	9	NS	NS	NA		NA		0.13	U	NA		0.12	U	NA		0.0036	U	NA		0.0014	U	0.0015	U	0.0016	U	0.088	U	0.0012	U	0.0018	U
	1,3-Dichlorobenzene	mg/kg	3	NS	NS	NA		NA		0.13	U	NA		0.12	U	NA		0.0036	U	NA		0.0014	U	0.0015	U	0.0016	U	0.088	U	0.0012	U	0.0018	U
	1,4-Dichlorobenzene	mg/kg	0.7	NS	NS	NA		NA		0.13	U	NA		0.12	U	NA		0.0036	U	NA		0.0014	U	0.0015	U	0.0016	U	0.088	U	0.0012	U	0.0018	U
	Methyl tert butyl ether	mg/kg	0.1	NS	NS	NA		NA		0.13	U	NA		0.12	U	NA		0.0036	U	NA		0.0014	U	0.0015	U	0.0016	U	0.088	U	0.0012	U	0.0018	U
	p/m-Xylene	mg/kg	100	NS	NS	NA		NA		0.13	U	NA		0.12</																			

TABLE 2
Additional Characterization Soil Analytical Results
Green Line Extension Project - Washington Street
Somerville, Massachusetts

Sample Location: Sample Depth^: Sample Date:						GLC-WASH(A)	GLC-WASH(B)	GLX-TPW-401	GLX-TPW-401A	GLX-TPW-402	GLX-TPW-402A	GLX-TPW-403	GLX-TPW-403A	GLX-TPW-404	GLX-TPW-405	GLX-TPW-406		GLX-TPW-407	GLX-TPW-408
						02/25/2020	02/25/2020	11/06/2019	03/01/2020	11/06/2019	03/09/2020	11/06/2019	03/01/2020	02/25/2020	02/25/2020	0-2/1 ft	1 ft	0-5/3 ft	0-4/3 ft
																Low VOC	High VOC		
Analysis	Analyte	Sample Location:	RCS-1	Unlined Landfill**	Lined Landfill**														
	Naphthalene	mg/kg	4	NS	NS	NA	NA	0.26 U	NA	0.24 U	NA	0.0071 U	NA	0.0028 U	0.0029 U	0.0032 U	0.18 U	0.0024 U	0.0036 U
	n-Propylbenzene	mg/kg	100	NS	NS	NA	NA	0.065 U	NA	0.06 U	NA	0.0018 U	NA	0.00071 U	0.00073 U	0.00080 U	0.044 U	0.00060 U	0.00090 U
	1,2,3-Trichlorobenzene	mg/kg	NS	NS	NS	NA	NA	0.13 U	NA	0.12 U	NA	0.0036 U	NA	0.0014 U	0.0015 U	0.0016 U	0.088 U	0.0012 U	0.0018 U
	1,2,4-Trichlorobenzene	mg/kg	2	NS	NS	NA	NA	0.13 U	NA	0.12 U	NA	0.0036 U	NA	0.0014 U	0.0015 U	0.0016 U	0.088 U	0.0012 U	0.0018 U
	1,3,5-Trimethylbenzene	mg/kg	10	NS	NS	NA	NA	0.13 U	NA	0.12 U	NA	0.0036 U	NA	0.0014 U	0.0015 U	0.0016 U	0.088 U	0.0012 U	0.0018 U
	1,2,4-Trimethylbenzene	mg/kg	1,000	NS	NS	NA	NA	0.13 U	NA	0.12 U	NA	0.0036 U	NA	0.0014 U	0.0015 U	0.0016 U	0.088 U	0.0012 U	0.0018 U
	Ethyl ether	mg/kg	100	NS	NS	NA	NA	0.13 U	NA	0.12 U	NA	0.0036 U	NA	0.0014 U	0.0015 U	0.0016 U	0.088 U	0.0012 U	0.0018 U
	Isopropyl Ether	mg/kg	100	NS	NS	NA	NA	0.13 U	NA	0.12 U	NA	0.0036 U	NA	0.0014 U	0.0015 U	0.0016 U	0.088 U	0.0012 U	0.0018 U
	Ethyl-Tert-Butyl-Ether	mg/kg	NS	NS	NS	NA	NA	0.13 U	NA	0.12 U	NA	0.0036 U	NA	0.0014 U	0.0015 U	0.0016 U	0.088 U	0.0012 U	0.0018 U
	Tertiary-Amyl Methyl Ether	mg/kg	NS	NS	NS	NA	NA	0.13 U	NA	0.12 U	NA	0.0036 U	NA	0.0014 U	0.0015 U	0.0016 U	0.088 U	0.0012 U	0.0018 U
	1,4-Dioxane	mg/kg	0.2	NS	NS	NA	NA	5.2 U	NA	4.8 U	NA	0.14 U	NA	0.057 U	0.059 U	0.064 U	3.5 U	0.048 U	0.072 U
	Total VOCs	mg/kg	N/A	4	10	NA	NA	0.041	NA	2.03	NA	0.006	NA	0.013	0.001	0.325	0.140	0.061	0.190
SVOCs																			
	Acenaphthene	mg/kg	4	NS	NS	1.4 U	2	NA	0.14 U	NA	0.15 U	NA	0.15 U	0.15 U	0.14 U	0.14 U	NA	0.14 U	0.37
	1,2,4-Trichlorobenzene	mg/kg	2	NS	NS	1.8 U	1.8 U	NA	0.18 U	NA	0.18 U	NA	0.19 U	0.18 U	0.18 U	0.18 U	NA	0.17 U	0.19 U
	Hexachlorobenzene	mg/kg	0.7	NS	NS	0.75 U	0.76 U	NA	0.076 U	NA	0.077 U	NA	0.081 U	0.077 U	0.075 U	0.075 U	NA	0.072 U	0.079 U
	Bis(2-chloroethyl)ether	mg/kg	0.7	NS	NS	0.75 U	0.76 U	NA	0.076 U	NA	0.077 U	NA	0.081 U	0.077 U	0.075 U	0.075 U	NA	0.072 U	0.079 U
	2-Chloronaphthalene	mg/kg	1,000	NS	NS	1.8 U	1.8 U	NA	0.18 U	NA	0.18 U	NA	0.19 U	0.18 U	0.18 U	0.18 U	NA	0.17 U	0.19 U
	1,2-Dichlorobenzene	mg/kg	9	NS	NS	1.8 U	1.8 U	NA	0.18 U	NA	0.18 U	NA	0.19 U	0.18 U	0.18 U	0.18 U	NA	0.17 U	0.19 U
	1,3-Dichlorobenzene	mg/kg	3	NS	NS	1.8 U	1.8 U	NA	0.18 U	NA	0.18 U	NA	0.19 U	0.18 U	0.18 U	0.18 U	NA	0.17 U	0.19 U
	1,4-Dichlorobenzene	mg/kg	0.7	NS	NS	0.75 U	0.76 U	NA	0.076 U	NA	0.077 U	NA	0.081 U	0.077 U	0.075 U	0.075 U	NA	0.072 U	0.079 U
	3,3'-Dichlorobenzidine	mg/kg	3	NS	NS	1.8 U	1.8 U	NA	0.18 U	NA	0.18 U	NA	0.19 U	0.18 U	0.18 U	0.18 U	NA	0.17 U	0.19 U
	2,4-Dinitrotoluene	mg/kg	0.7	NS	NS	0.75 U	0.76 U	NA	0.076 U	NA	0.077 U	NA	0.081 U	0.077 U	0.075 U	0.075 U	NA	0.072 U	0.079 U
	2,6-Dinitrotoluene	mg/kg	100	NS	NS	1.8 U	1.8 U	NA	0.18 U	NA	0.18 U	NA	0.19 U	0.18 U	0.18 U	0.18 U	NA	0.17 U	0.19 U
	Azobenzene	mg/kg	NS	NS	NS	1.8 U	1.8 U	NA	0.18 U	NA	0.18 U	NA	0.19 U	0.18 U	0.18 U	0.18 U	NA	0.17 U	0.19 U
	Fluoranthene	mg/kg	1,000	NS	NS	16	17	NA	0.12	NA	0.21	NA	0.12 U	0.55	0.11 U	0.11 U	NA	0.1 U	8.8
	4-Bromophenyl phenyl ether	mg/kg	100	NS	NS	1.8 U	1.8 U	NA	0.18 U	NA	0.18 U	NA	0.19 U	0.18 U	0.18 U	0.18 U	NA	0.17 U	0.19 U
	Bis(2-chloroisopropyl)ether	mg/kg	0.7	NS	NS	0.75 U	0.76 U	NA	0.076 U	NA	0.077 U	NA	0.081 U	0.077 U	0.075 U	0.075 U	NA	0.072 U	0.079 U
	Bis(2-chloroethoxy)methane	mg/kg	500	NS	NS	1.9 U	2 U	NA	0.2 U	NA	0.2 U	NA	0.21 U	0.2 U	0.19 U	0.19 U	NA	0.18 U	0.2 U
	Hexachlorobutadiene	mg/kg	30	NS	NS	1.8 U	1.8 U	NA	0.18 U	NA	0.18 U	NA	0.19 U	0.18 U	0.18 U	0.18 U	NA	0.17 U	0.19 U
	Hexachloroethane	mg/kg	0.7	NS	NS	0.75 U	0.76 U	NA	0.076 U	NA	0.077 U	NA	0.081 U	0.077 U	0.075 U	0.075 U	NA	0.072 U	0.079 U
	Isophorone	mg/kg	100	NS	NS	1.6 U	1.6 U	NA	0.16 U	NA	0.16 U	NA	0.17 U	0.16 U	0.16 U	0.16 U	NA	0.15 U	0.17 U
	Naphthalene	mg/kg	4	NS	NS	1.8 U	1.8 U	NA	0.18 U	NA	0.18 U	NA	0.2	0.18 U	0.18 U	0.18 U	NA	0.17 U	0.68
	Nitrobenzene	mg/kg	500	NS	NS	1.6 U	1.6 U	NA	0.16 U	NA	0.16 U	NA	0.17 U	0.16 U	0.16 U	0.16 U	NA	0.15 U	0.17 U
	Bis(2-Ethylhexyl)phthalate	mg/kg	90	NS	NS	1.8 U	1.8 U	NA	0.18 U	NA	0.18 U	NA	0.19 U	0.18 U	0.18 U	0.18 U	NA	0.17 U	0.19 U
	Butyl benzyl phthalate	mg/kg	100	NS	NS	1.8 U	1.8 U	NA	0.18 U	NA	0.18 U	NA	0.19 U	0.18 U	0.18 U	0.18 U	NA	0.17 U	0.19 U
	Di-n-butylphthalate	mg/kg	50	NS	NS	1.8 U	1.8 U	NA	0.18 U	NA	0.18 U	NA	0.19 U	0.18 U	0.18 U	0.18 U	NA	0.17 U	0.19 U
	Di-n-octylphthalate	mg/kg	1,000	NS	NS	1.8 U	1.8 U	NA	0.18 U	NA	0.18 U	NA	0.19 U	0.18 U	0.18 U	0.18 U	NA	0.17 U	0.19 U
	Diethyl phthalate	mg/kg	10	NS	NS	1.8 U	1.8 U	NA	0.18 U	NA	0.18 U	NA	0.19 U	0.18 U	0.18 U	0.18 U	NA	0.17 U	0.19 U
	Dimethyl phthalate	mg/kg	0.7	NS	NS	0.75 U	0.76 U	NA	0.076 U	NA	0.077 U	NA	0.081 U	0.077 U	0.075 U	0.075 U	NA	0.072 U	0.079 U
	Benzo(a)anthracene	mg/kg	7	NS	NS	7	7.2	NA	0.11 U	NA	0.13	NA	0.12 U	0.36	0.11 U	0.11 U	NA	0.1 U	5.9
	Benzo(a)pyrene	mg/kg	2	NS	NS	6.3	5.8	NA	0.14 U	NA	0.15 U	NA	0.15 U	0.45	0.14 U	0.14 U	NA	0.14 U	6.2
	Benzo(b)fluoranthene	mg/kg	7	NS	NS	8.7	8.3	NA	0.11	NA	0.15	NA	0.12 U	0.6	0.11 U	0.11 U	NA	0.1 U	7.3
	Benzo(k)fluoranthene	mg/kg	70	NS	NS	2.8	2.5	NA	0.11 U	NA	0.11 U	NA	0.12 U	0.18	0.11 U	0.11 U	NA	0.1 U	2.3
	Chrysene	mg/kg	70	NS	NS	6.6	7.1	NA	0.11 U	NA	0.11	NA	0.12 U	0.4	0.11 U	0.11 U	NA	0.1 U	5.2
	Acenaphthylene	mg/kg	1	NS	NS	1.4 U	1.4 U	NA	0.14 U	NA	0.15 U	NA	0.15 U	0.21	0.14 U	0.14 U	NA	0.14 U	0.88
	Anthracene	mg/kg	1,000	NS	NS	3.5	4.2	NA	0.11 U	NA	0.11 U	NA	0.12 U	0.19	0.11 U	0.11 U	NA	0.1 U	1.9
	Benzo(ghi)perylene	mg/kg	1,000	NS	NS	4	3.1	NA	0.14 U	NA	0.15 U	NA	0.15 U	0.46	0.14 U	0.14 U	NA	0.14 U	3.4
	Fluorene	mg/kg	1,000	NS	NS	1.8 U	2.2	NA	0.18 U	NA	0.18 U	NA	0.19 U	0.18 U	0.18 U	0.18 U	NA	0.17 U	0.62
	Phenanthrene	mg/kg	10	NS	NS	11	20	NA	0.11 U	NA	0.11 U	NA	0.12 U	0.3	0.11 U	0.11 U	NA	0.1 U	5.8
	Dibenzo(a,h)anthracene	mg/kg	0.7	NS	NS	0.85	0.78	NA	0.076 U	NA	0.077 U	NA	0.081 U	0.094	0.075 U	0.075 U	NA	0.072 U	0.84
	Indeno(1,2,3-cd)Pyrene	mg/kg	7	NS	NS	4.2	3.4	NA	0.14 U	NA	0.15 U	NA	0.15 U	0.38	0.14 U	0.14 U	NA	0.14 U	3.8
	Pyrene	mg/kg	1,000	NS	NS	13	15	NA	0.12	NA	0.2	NA	0.12	0.56	0.11 U	0.11 U	NA	0.1 U	7.6
	Aniline	mg/kg	1,000	NS	NS	2.2 U	2.2 U	NA	0.22 U	NA	0.22 U	NA	0.23 U	0.22 U	0.22 U	0.21 U	NA	0.2 U	0.23 U
	4-Chloroaniline	mg/kg	1	NS	NS	1.8 U	1.8 U	NA	0.18 U	NA	0.18 U	NA	0.19 U	0.18 U	0.18 U	0.18 U	NA	0.17 U	0.19 U
	Dibenzofuran	mg/kg	100	NS	NS	1.8 U	1.8 U	NA	0.18 U	NA	0.18 U	NA	0.19 U	0.18 U	0.18 U	0.18 U	NA	0.17 U	0.48
	2-Methylnaphthalene	mg/kg	0.7	NS	NS	0.75 U	0.76 U	NA	0.076 U	NA	0.077 U	NA	0.081 U	0.16	0.075 U	0.075 U	NA	0.072 U	0.23
	Acetophenone	mg/kg	1,000	NS	NS	1.8 U	1.8 U	NA	0.18 U	NA	0.18 U	NA	0.19 U	0.18 U	0.18 U	0.18 U	NA	0.17 U	0.19 U
	2,4,6-Trichlorophenol	mg/kg	0.7	NS	NS	0.75 U	0.76 U	NA	0.076 U	NA	0.077 U	NA	0.081 U	0.077 U	0.075 U	0.075 U	NA	0.072 U	0.079 U
	2-Chlorophenol	mg/kg	0.7	NS	NS	0.75 U	0.76 U	NA	0.076 U	NA	0.077 U	NA	0.081 U	0.077 U	0.075 U	0.075 U	NA	0.072 U	0.079 U
	2,4-Dichlorophenol	mg/kg	0.7	NS	NS	0.75 U	0.76 U	NA	0.076 U	NA	0.077 U	NA	0.081 U	0.077 U	0.075 U	0.075 U	NA	0.072 U	0.079 U
	2,4-Dimethylphenol	mg/kg	0.7	NS	NS	0.75 U	0.76 U	NA	0.076 U	NA	0.077 U	NA	0.081 U	0.077 U	0.075 U	0.075 U	NA	0.072 U	0.079 U
	2-Nitrophenol	mg/kg	100	NS	NS	3.9 U	3.9 U	NA	0.39 U	NA	0.39 U	NA	0.42 U	0.4 U	0.39 U	0.39 U	NA	0.37 U	0.41 U
	4-Nitrophenol	mg/kg	100	NS	NS	2.5 U	2.5 U	NA	0.25 U	NA	0.26 U	NA	0.27 U	0.26 U	0.25 U	0.25 U	NA	0.24 U	0.26 U

TABLE 2
Additional Characterization Soil Analytical Results
Green Line Extension Project - Washington Street
Somerville, Massachusetts

Sample Location: Sample Depth^: Sample Date:						GLC-WASH(A)	GLC-WASH(B)	GLX-TPW-401	GLX-TPW-401A	GLX-TPW-402	GLX-TPW-402A	GLX-TPW-403	GLX-TPW-403A	GLX-TPW-404	GLX-TPW-405	GLX-TPW-406		GLX-TPW-407	GLX-TPW-408
						02/25/2020	02/25/2020	0-3/3 ft 11/06/2019	0-1 ft 03/01/2020	0-6/4 ft 11/06/2019	0-4 ft 03/09/2020	0-3/3 ft 11/06/2019	0-3 ft 03/01/2020	0-3/2 ft 02/25/2020	0-3/2 ft 02/25/2020	0-2/1 ft 02/26/2020	1 ft 02/26/2020	0-5/3 ft 02/26/2020	0-4/3 ft 02/26/2020
Analysis	Analyte	Sample Location:	RCS-1	Unlined Landfill**	Lined Landfill**											Low VOC	High VOC		
	2,4-Dinitrophenol	mg/kg	3	NS	NS	8.6 U	8.7 U	NA	0.87 U	NA	0.88 U	NA	0.93 U	0.88 U	0.86 U	0.86 U	NA	0.82 U	0.9 U
	Pentachlorophenol	mg/kg	3	NS	NS	3.6 U	3.6 U	NA	0.36 U	NA	0.36 U	NA	0.39 U	0.37 U	0.36 U	0.36 U	NA	0.34 U	0.38 U
	Phenol	mg/kg	1	NS	NS	1.8 U	1.8 U	NA	0.18 U	NA	0.18 U	NA	0.19 U	0.18 U	0.18 U	0.18 U	NA	0.17 U	0.19 U
	2-Methylphenol	mg/kg	500	NS	NS	1.8 U	1.8 U	NA	0.18 U	NA	0.18 U	NA	0.19 U	0.18 U	0.18 U	0.18 U	NA	0.17 U	0.19 U
	3-Methylphenol/4-Methylphenol	mg/kg	NS	NS	NS	2.6 U	2.6 U	NA	0.26 U	NA	0.26 U	NA	0.28 U	0.26 U	0.26 U	0.26 U	NA	0.24 U	0.27 U
	2,4,5-Trichlorophenol	mg/kg	4	NS	NS	1.8 U	1.8 U	NA	0.18 U	NA	0.18 U	NA	0.19 U	0.18 U	0.18 U	0.18 U	NA	0.17 U	0.19 U
	Pyridine	mg/kg	500	NS	NS	1.9 U	2 U	NA	0.2 U	NA	0.2 U	NA	0.21 U	0.2 U	0.19 U	0.19 U	NA	0.18 U	0.2 U
	Total SVOCs	mg/kg	N/A	100	100	84.0	98.6	NA	0.350	NA	0.80	NA	0.320	4.89	ND	ND	NA	ND	62.3
Pesticides																			
	Delta-BHC	mg/kg	10	NS	NS	NA	NA	NA	NA	NA	0.00170 U	NA	NA	0.00178 U	0.00172 U	0.00169 U	NA	0.00166 U	0.00177 U
	Lindane	mg/kg	0.003	NS	NS	NA	NA	NA	NA	NA	0.000566 U	NA	NA	0.000594 U	0.000573 U	0.000563 U	NA	0.000552 U	0.000590 U
	Alpha-BHC	mg/kg	50	NS	NS	NA	NA	NA	NA	NA	0.000707 U	NA	NA	0.000742 U	0.000716 U	0.000704 U	NA	0.000690 U	0.000738 U
	Beta-BHC	mg/kg	10	NS	NS	NA	NA	NA	NA	NA	0.00178 U	NA	NA	0.00178 U	0.00172 U	0.00169 U	NA	0.00166 U	0.00177 U
	Heptachlor	mg/kg	0.3	NS	NS	NA	NA	NA	NA	NA	0.000849 U	NA	NA	0.000890 U	0.000859 U	0.000845 U	NA	0.000828 U	0.000885 U
	Aldrin	mg/kg	0.08	NS	NS	NA	NA	NA	NA	NA	0.00170 U	NA	NA	0.00178 U	0.00172 U	0.00169 U	NA	0.00166 U	0.00177 U
	Heptachlor epoxide	mg/kg	0.1	NS	NS	NA	NA	NA	NA	NA	0.00318 U	NA	NA	0.00334 U	0.00322 U	0.00317 U	NA	0.00310 U	0.00332 U
	Endrin	mg/kg	10	NS	NS	NA	NA	NA	NA	NA	0.000707 U	NA	NA	0.000742 U	0.000716 U	0.000704 U	NA	0.000690 U	0.00125 IP
	Endrin ketone	mg/kg	10	NS	NS	NA	NA	NA	NA	NA	0.00170 U	NA	NA	0.00178 U	0.00172 U	0.00169 U	NA	0.00166 U	0.00177 U
	Dieldrin	mg/kg	0.08	NS	NS	NA	NA	NA	NA	NA	0.00106 U	NA	NA	0.00111 U	0.00107 U	0.00106 U	NA	0.00104 U	0.00111 U
	4,4'-DDE	mg/kg	6	NS	NS	NA	NA	NA	NA	NA	0.00170 U	NA	NA	0.00178 U	0.00172 U	0.00169 U	NA	0.00166 U	0.00177 U
	4,4'-DDD	mg/kg	8	NS	NS	NA	NA	NA	NA	NA	0.00170 U	NA	NA	0.00178 U	0.00172 U	0.00169 U	NA	0.00166 U	0.00177 U
	4,4'-DDT	mg/kg	6	NS	NS	NA	NA	NA	NA	NA	0.00318 U	NA	NA	0.00334 U	0.00322 U	0.00317 U	NA	0.00310 U	0.00332 U
	Endosulfan I	mg/kg	0.5	NS	NS	NA	NA	NA	NA	NA	0.00170 U	NA	NA	0.00178 U	0.00172 U	0.00169 U	NA	0.00166 U	0.00177 U
	Endosulfan II	mg/kg	0.5	NS	NS	NA	NA	NA	NA	NA	0.00170 U	NA	NA	0.00178 U	0.00172 U	0.00169 U	NA	0.00166 U	0.00177 U
	Endosulfan sulfate	mg/kg	0.5	NS	NS	NA	NA	NA	NA	NA	0.000707 U	NA	NA	0.000742 U	0.000716 U	0.000704 U	NA	0.000690 U	0.000738 U
	Methoxychlor	mg/kg	200	NS	NS	NA	NA	NA	NA	NA	0.00318 U	NA	NA	0.00334 U	0.00322 U	0.00317 U	NA	0.00310 U	0.00332 U
	Chlordane	mg/kg	0.7	NS	NS	NA	NA	NA	NA	NA	0.0141 U	NA	NA	0.0148 U	0.0143 U	0.0141 U	NA	0.0138 U	0.0148 U
	Hexachlorobenzene	mg/kg	0.7	NS	NS	NA	NA	NA	NA	NA	0.00170 U	NA	NA	0.00178 U	0.00172 U	0.00169 U	NA	0.00166 U	0.00177 U
Herbicides																			
	MCPP	mg/kg	NS	NS	NS	NA	NA	NA	NA	NA	3.7 U	NA	NA	3.7 U	3.6 U	3.6 U	NA	3.5 U	3.7 U
	MCPA	mg/kg	100	NS	NS	NA	NA	NA	NA	NA	3.7 U	NA	NA	3.7 U	3.6 U	3.6 U	NA	3.5 U	3.7 U
	Dalapon	mg/kg	1,000	NS	NS	NA	NA	NA	NA	NA	0.037 U	NA	NA	0.037 U	0.036 U	0.036 U	NA	0.035 U	0.037 U
	Dicamba	mg/kg	500	NS	NS	NA	NA	NA	NA	NA	0.037 U	NA	NA	0.037 U	0.036 U	0.036 U	NA	0.035 U	0.037 U
	Dichloroprop	mg/kg	NS	NS	NS	NA	NA	NA	NA	NA	0.037 U	NA	NA	0.037 U	0.036 U	0.036 U	NA	0.035 U	0.037 U
	2,4-D	mg/kg	100	NS	NS	NA	NA	NA	NA	NA	0.037 U	NA	NA	0.037 U	0.036 U	0.036 U	NA	0.035 U	0.037 U
	2,4-DB	mg/kg	100	NS	NS	NA	NA	NA	NA	NA	0.037 U	NA	NA	0.037 U	0.036 U	0.036 U	NA	0.035 U	0.037 U
	2,4,5-T	mg/kg	100	NS	NS	NA	NA	NA	NA	NA	0.037 U	NA	NA	0.037 U	0.036 U	0.036 U	NA	0.035 U	0.037 U
	2,4,5-TP (Silvex)	mg/kg	100	NS	NS	NA	NA	NA	NA	NA	0.037 U	NA	NA	0.037 U	0.036 U	0.036 U	NA	0.035 U	0.037 U
PCB Aroclors																			
	Aroclor-1016	mg/kg	1	NS	NS	0.0348 U	0.0360 U	0.0350 U	0.0358 U	0.0385 U	NA	0.0393 U	0.0373 U	0.0367 U	0.0349 U	0.0356 U	NA	0.0342 U	0.0373 U
	Aroclor-1221	mg/kg	1	NS	NS	0.0348 U	0.0360 U	0.0350 U	0.0358 U	0.0385 U	NA	0.0393 U	0.0373 U	0.0367 U	0.0349 U	0.0356 U	NA	0.0342 U	0.0373 U
	Aroclor-1232	mg/kg	1	NS	NS	0.0348 U	0.0360 U	0.0350 U	0.0358 U	0.0385 U	NA	0.0393 U	0.0373 U	0.0367 U	0.0349 U	0.0356 U	NA	0.0342 U	0.0373 U
	Aroclor-1242	mg/kg	1	NS	NS	0.0348 U	0.0360 U	0.0350 U	0.0358 U	0.0385 U	NA	0.0393 U	0.0373 U	0.0367 U	0.0349 U	0.0356 U	NA	0.0342 U	0.0373 U
	Aroclor-1248	mg/kg	1	NS	NS	0.0348 U	0.0360 U	0.0350 U	0.0358 U	0.0385 U	NA	0.0393 U	0.0373 U	0.0367 U	0.0349 U	0.0356 U	NA	0.0342 U	0.0373 U
	Aroclor-1254	mg/kg	1	NS	NS	0.0348 U	0.0360 U	0.0350 U	0.0358 U	0.0385 U	NA	0.0393 U	0.0373 U	0.0367 U	0.0349 U	0.0356 U	NA	0.0342 U	0.0373 U
	Aroclor-1260	mg/kg	1	NS	NS	0.0348 U	0.0360 U	0.0350 U	0.0358 U	0.0385 U	NA	0.0393 U	0.0373 U	0.0367 U	0.0349 U	0.0356 U	NA	0.0342 U	0.0373 U
	Aroclor-1262	mg/kg	1	NS	NS	0.0348 U	0.0360 U	0.0350 U	0.0358 U	0.0385 U	NA	0.0393 U	0.0373 U	0.0367 U	0.0349 U	0.0356 U	NA	0.0342 U	0.0373 U
	Aroclor-1268	mg/kg	1	NS	NS	0.0348 U	0.0360 U	0.0350 U	0.0358 U	0.0385 U	NA	0.0393 U	0.0373 U	0.0367 U	0.0349 U	0.0356 U	NA	0.0342 U	0.0373 U
	PCBs, Total	mg/kg	1	2	2	0.0348 U	0.0360 U	0.0350 U	0.0358 U	0.0385 U	NA	0.0393 U	0.0373 U	0.0367 U	0.0349 U	0.0356 U	NA	0.0342 U	0.0373 U
TPH																			
	Total Petroleum Hydrocarbons C10-C36	mg/kg	1,000	2,500	5,000	216	195	NA	114	NA	35.5	NA	112 U	122	35.3 U	35.8 U	NA	34.1 U	397
Metals, total																			
	Antimony	mg/kg	20	NS	NS	2.59	2.32	2.10 U	NA	2.35 U	NA	2.40 U	NA	NA	NA	NA	NA	NA	NA
	Arsenic	mg/kg	20	40	40	8.13	9.58	2.31	4.02	14.3	NA	4.48	2.55	9.38	5.37	2.92	NA	1.42	6.77
	Barium	mg/kg	1,000	NS	NS	26.6	48.5	14.9	24.6	35.9	NA	33.4	13.6	46.0	22.9	18.9	NA	11.6	26.9
	Beryllium	mg/kg	90	NS	NS	0.231	0.276	0.210 U	NA	0.466	NA	0.240 U	NA	NA	NA	NA	NA	NA	NA
	Cadmium	mg/kg	70	30	80	0.886	0.903	0.458	0.828	0.471	NA	0.480 U	0.443 U	1.03	0.435	0.431 U	NA	0.725	0.776
	Chromium	mg/kg	100	1,000	1,000	10.4	14.2	6.72	11.9	34.4	NA	8.72	4.78	24.9	11.6	5.82	NA	11.7	13.8
	Lead	mg/kg	200	1,000	2,000	96.4	198	6.31	31.7	75.0	NA	87.3	6.82	60.9	4.10	6.26	NA	2.32	129
	Mercury	mg/kg	20	10	10	0.142	0.154	NA	0.080 U	NA	0.082 U	NA	0.086 U	0.10	0.082 U	0.077 U	NA	0.079 U	0.791
	Nickel	mg/kg	600	NS	NS	8.94	10.7	5.46	NA	31.1	NA	6.52	NA	NA	NA	NA	NA	NA	NA
	Selenium	mg/kg	400	NS	NS	2.18 U	2.12 U	2.10 U	2.12 U	2.35 U	NA	2.40 U	2.21 U	2.12 U	2.13 U	2.15 U	NA	2.08 U	2.26 U
	Silver	mg/kg	100	NS	NS	0.437 U	0.424 U	0.420 U	0.425 U	0.471 U	NA	0.480 U	0.443 U	0.424 U	0.427 U	0.431 U	NA	0.416 U	0.451 U
	Thallium	mg/kg	8	NS	NS	2.18 U	2.12 U	2.10 U	NA	2.35 U	NA	2.40 U	NA	NA	NA	NA	NA	NA	NA

TABLE 2
Additional Characterization Soil Ananalytical Results
Green Line Extension Project - Washington Street
Somerville, Massachusetts

Sample Location: Sample Depth^: Sample Date:						GLC-WASH(A)	GLC-WASH(B)	GLX-TPW-401	GLX-TPW-401A	GLX-TPW-402	GLX-TPW-402A	GLX-TPW-403	GLX-TPW-403A	GLX-TPW-404	GLX-TPW-405	GLX-TPW-406		GLX-TPW-407	GLX-TPW-408														
						N/A	N/A	0-3/3 ft	0-1 ft	0-6/4 ft	0-4 ft	0-3/3 ft	0-3 ft	0-3/2 ft	0-3/2 ft	0-2/1 ft	1 ft	0-5/3 ft	0-4/3 ft														
						02/25/2020	02/25/2020	11/06/2019	03/01/2020	11/06/2019	03/09/2020	11/06/2019	03/01/2020	02/25/2020	02/25/2020	02/26/2020	02/26/2020	02/26/2020	02/26/2020														
Analysis	Analyte	Sample Location:	RCS-1	Unlined Landfill**	Lined Landfill**											Low VOC		High VOC															
	Vanadium	mg/kg	400	NS	NS	12.9		14.7		7.86		NA		32.7		NA		13.3		NA		NA		NA		NA		NA		NA		NA	
	Zinc	mg/kg	1,000	NS	NS	77.5		113		24.6		NA		127		NA		73.9		NA		NA		NA		NA		NA		NA		NA	

TABLE 2
Additional Characterization Soil Ananalytical Results
Green Line Extension Project - Washington Street
Somerville, Massachusetts

Sample Location: Sample Depth^: Sample Date:						GLC-WASH(A)		GLC-WASH(B)		GLX-TPW-401		GLX-TPW-401A		GLX-TPW-402		GLX-TPW-402A		GLX-TPW-403		GLX-TPW-403A		GLX-TPW-404		GLX-TPW-405		GLX-TPW-406				GLX-TPW-407		GLX-TPW-408	
						02/25/2020		02/25/2020		11/06/2019		03/01/2020		11/06/2019		03/09/2020		11/06/2019		03/01/2020		02/25/2020		02/25/2020		02/26/2020		02/26/2020		02/26/2020		02/26/2020	
Analysis	Analyte	Sample Location:	RCS-1	Unlined Landfill**	Lined Landfill**																					Low VOC		High VOC					
Metals, TCLP						NA		0.500	U	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		0.500	U
General Chemistry																																	
	Ignitability	none	NS	NS	NS	NI		NI		NA		NI		NA		NI		NA		NI		NI		NI		NI		NA		NI		NI	
	Specific conductance	umhos/cm	NS	4,000	8,000	34		41		NA		160		NA		40		NA		84		81		60		120		NA		91		60	
	pH	su	NS	>2 <12.5	>2 <12.5	8.4		8.6		6.8		9.0		9.2		8.9		10.0		8.1		7.8		8.0		9.8		NA		9.8		8.5	
	Reactive Cyanide	mg/kg	NS	< 250	< 250	10	U	10	U	NA		10	U	NA		10	U	NA		10	U	10	U	10	U	10	U	NA		10	U	10	U
	Reactive Sulfide	mg/kg	NS	< 500	< 500	10	U	10	U	NA		10	U	NA		10	U	NA		10	U	10	U	10	U	10	U	NA		10	U	10	U

Notes:

mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).

mg/L - milligrams per liter.

su - Standard unit.

umhos/cm - Micro-mhos per centimeter.

E - Value exceeds calibration range.

I - The lower value for the two columns has been reported due to obvious interference.

NA - Sample not analyzed for the listed analyte.

N/A - Not available/applicable.

ND - Not detected.

NI - Not ignitable.

NS - No MassDEP standards exist for this analyte.

P - The RPD (relative percent difference) between the results for the two columns exceeds the method-specified criteria.

U - Analyte was not detected at specified quantitation limit.

Values in **bold** indicate the analyte was detected.

Values shown in bold and shaded type are equal to RCS-1 or exceed one or more of the listed MassDEP standards/criteria.

VOCs - Volatile Organic Compounds.

SVOCs - Semivolatile Organic Compounds.

PCBs - Polychlorinated Biphenyls.

TPH - Total Petroleum Hydrocarbons.

TCLP - Toxicity Characteristic Leaching Procedure.

RC - Reportable concentration.

* - EPA SW-846 Chapter 7, Table 7-1, Maximum Concentration of Contaminants for Toxicity Characteristic.

** - Reuse and Disposal of Contaminated Soil at Massachusetts Landfills, MassDEP Policy # COMM-97-001, August 1997.

^ - Sample depth for other/VOCs analysis; otherwise for all the analyses.

TABLE 2
Additional Characterization Soil Analytical Results
Green Line Extension Project - Washington Street
Somerville, Massachusetts

Sample Location: Sample Depth: Sample Date:						GLX-TPW-409	GLX-TPW-410	GLX-TPW-411	GLX-TPW-412	GLX-TPW-601				GLX-TPW-602				GLX-TPW-603																	
						0-3/1.5-2 ft 03/16/2020	0-5/1 ft 02/26/2020	0-4/2-2.5 ft 03/27/2020	0-2/1-2 ft 03/01/2020	0-8 ft 10/20/2019	0-2/2 ft 10/20/2019	2-5/3 ft 10/20/2019	5-8/6 ft 10/20/2019	0-8 ft 10/20/2019	0-2/2 ft 10/20/2019	2-5/4.5 ft 10/20/2019	5-8/6.5 ft 10/20/2019	0-5 ft 10/20/2019	0-2/1.5 ft 10/20/2019	2-5/3 ft 10/20/2019															
Analysis	Analyte	Sample Location:	RCS-1	Unlined Landfill**	Lined Landfill**																														
VOCs																																			
	Methylene chloride	mg/kg	0.1	NS	NS	0.2	U	0.0043	U	0.0025	U	0.32	U	NA		0.0035	U	0.54	U	0.0038	U	NA		0.28	U	2.4	U	0.0050	U	NA		0.0033	U	0.0033	U
	1,1-Dichloroethane	mg/kg	0.4	NS	NS	0.039	U	0.00087	U	0.00049	U	0.063	U	NA		0.0007	U	0.11	U	0.00076	U	NA		0.056	U	0.47	U	0.0010	U	NA		0.00066	U	0.00065	U
	Chloroform	mg/kg	0.2	NS	NS	0.059	U	0.0013	U	0.00074	U	0.095	U	NA		0.001	U	0.16	U	0.0011	U	NA		0.084	U	0.71	U	0.0015	U	NA		0.0010	U	0.00098	U
	Carbon tetrachloride	mg/kg	5	NS	NS	0.039	U	0.00087	U	0.00049	U	0.063	U	NA		0.0007	U	0.11	U	0.00076	U	NA		0.056	U	0.47	U	0.0010	U	NA		0.00066	U	0.00065	U
	1,2-Dichloropropane	mg/kg	0.1	NS	NS	0.039	U	0.00087	U	0.00049	U	0.063	U	NA		0.0007	U	0.11	U	0.00076	U	NA		0.056	U	0.47	U	0.0010	U	NA		0.00066	U	0.00065	U
	Dibromochloromethane	mg/kg	0.005	NS	NS	0.039	U	0.00087	U	0.00049	U	0.063	U	NA		0.0007	U	0.11	U	0.00076	U	NA		0.056	U	0.47	U	0.0010	U	NA		0.00066	U	0.00065	U
	1,1,2-Trichloroethane	mg/kg	0.1	NS	NS	0.039	U	0.00087	U	0.00049	U	0.063	U	NA		0.0007	U	0.11	U	0.00076	U	NA		0.056	U	0.47	U	0.0010	U	NA		0.00066	U	0.00065	U
	Tetrachloroethene	mg/kg	1	NS	NS	1.1		0.014		0.0029		0.032	U	NA		0.0012		0.7		0.00038	U	NA		0.028	U	0.24	U	0.00050	U	NA		0.00033	U	0.00033	U
	Chlorobenzene	mg/kg	1	NS	NS	0.02	U	0.00043	U	0.00025	U	0.032	U	NA		0.00035	U	0.054	U	0.00038	U	NA		0.028	U	0.24	U	0.00050	U	NA		0.00033	U	0.00033	U
	Trichlorofluoromethane	mg/kg	1,000	NS	NS	0.16	U	0.0035	U	0.0020	U	0.25	U	NA		0.0028	U	0.43	U	0.0030	U	NA		0.22	U	1.9	U	0.0040	U	NA		0.0027	U	0.0026	U
	1,2-Dichloroethane	mg/kg	0.1	NS	NS	0.039	U	0.00087	U	0.00049	U	0.063	U	NA		0.0007	U	0.11	U	0.00076	U	NA		0.056	U	0.47	U	0.0010	U	NA		0.00066	U	0.00065	U
	1,1,1-Trichloroethane	mg/kg	30	NS	NS	0.02	U	0.00046		0.00025	U	0.032	U	NA		0.00035	U	0.054	U	0.00038	U	NA		0.028	U	0.24	U	0.00050	U	NA		0.00033	U	0.00033	U
	Bromodichloromethane	mg/kg	0.1	NS	NS	0.02	U	0.00043	U	0.00025	U	0.032	U	NA		0.00035	U	0.054	U	0.00038	U	NA		0.028	U	0.24	U	0.00050	U	NA		0.00033	U	0.00033	U
	trans-1,3-Dichloropropene	mg/kg	0.01	NS	NS	0.039	U	0.00087	U	0.00049	U	0.063	U	NA		0.0007	U	0.11	U	0.00076	U	NA		0.056	U	0.47	U	0.0010	U	NA		0.00066	U	0.00065	U
	cis-1,3-Dichloropropene	mg/kg	0.01	NS	NS	0.02	U	0.00043	U	0.00025	U	0.032	U	NA		0.00035	U	0.054	U	0.00038	U	NA		0.028	U	0.24	U	0.00050	U	NA		0.00033	U	0.00033	U
	1,3-Dichloropropene, Total	mg/kg	0.01	NS	NS	0.02	U	0.00043	U	0.00025	U	0.032	U	NA		0.00035	U	0.054	U	0.00038	U	NA		0.028	U	0.24	U	0.00050	U	NA		0.00033	U	0.00033	U
	1,1-Dichloropropene	mg/kg	0.01	NS	NS	0.02	U	0.00043	U	0.00025	U	0.032	U	NA		0.00035	U	0.054	U	0.00038	U	NA		0.028	U	0.24	U	0.00050	U	NA		0.00033	U	0.00033	U
	Bromoform	mg/kg	0.1	NS	NS	0.16	U	0.0035	U	0.0020	U	0.25	U	NA		0.0028	U	0.43	U	0.0030	U	NA		0.22	U	1.9	U	0.0040	U	NA		0.0027	U	0.0026	U
	1,1,2,2-Tetrachloroethane	mg/kg	0.005	NS	NS	0.02	U	0.00043	U	0.00025	U	0.032	U	NA		0.00035	U	0.054	U	0.00038	U	NA		0.028	U	0.24	U	0.00050	U	NA		0.00033	U	0.00033	U
	Benzene	mg/kg	2	NS	NS	0.02	U	0.00043	U	0.0020		0.032	U	NA		0.00035	U	0.054	U	0.00038	U	NA		0.044		0.24	U	0.00050	U	NA		0.00033	U	0.00033	U
	Toluene	mg/kg	30	NS	NS	0.039	U	0.00087	U	0.00049	U	0.063	U	NA		0.0007	U	0.11	U	0.00076	U	NA		0.11		0.47	U	0.0010	U	NA		0.00066	U	0.00065	U
	Ethylbenzene	mg/kg	40	NS	NS	0.039	U	0.00087	U	0.00049	U	0.063	U	NA		0.0007	U	0.11	U	0.00076	U	NA		0.056	U	0.47	U	0.0010	U	NA		0.00066	U	0.00065	U
	Chloromethane	mg/kg	100	NS	NS	0.16	U	0.0035	U	0.0020	U	0.25	U	NA		0.0028	U	0.43	U	0.0030	U	NA		0.22	U	1.9	U	0.0040	U	NA		0.0027	U	0.0026	U
	Bromomethane	mg/kg	0.5	NS	NS	0.078	U	0.0017	U	0.00099	U	0.13	U	NA		0.0014	U	0.22	U	0.0015	U	NA		0.11	U	0.94	U	0.0020	U	NA		0.0013	U	0.0013	U
	Vinyl chloride	mg/kg	0.7	NS	NS	0.039	U	0.00087	U	0.00049	U	0.063	U	NA		0.0007	U	0.11	U	0.00076	U	NA		0.056	U	0.47	U	0.0010	U	NA		0.00066	U	0.00065	U
	Chloroethane	mg/kg	100	NS	NS	0.078	U	0.0017	U	0.00099	U	0.13	U	NA		0.0014	U	0.22	U	0.0015	U	NA		0.11	U	0.94	U	0.0020	U	NA		0.0013	U	0.0013	U
	1,1-Dichloroethene	mg/kg	3	NS	NS	0.039	U	0.00087	U	0.00049	U	0.063	U	NA		0.0007	U	0.11	U	0.00076	U	NA		0.056	U	0.47	U	0.0010	U	NA		0.00066	U	0.00065	U
	trans-1,2-Dichloroethene	mg/kg	1	NS	NS	0.059	U	0.0013	U	0.00074	U	0.095	U	NA		0.001	U	0.16	U	0.0011	U	NA		0.084	U	0.71	U	0.0015	U	NA		0.0010	U	0.00098	U
	Trichloroethene	mg/kg	0.3	NS	NS	0.05		0.0012		0.00025	U	0.032	U	NA		0.00035	U	0.054	U	0.00038	U	NA		0.028	U	0.24	U	0.00050	U	NA		0.00033	U	0.00033	U
	1,2-Dich																																		

TABLE 2
Additional Characterization Soil Analytical Results
Green Line Extension Project - Washington Street
Somerville, Massachusetts

Sample Location: Sample Depth^: Sample Date:						GLX-TPW-409	GLX-TPW-410	GLX-TPW-411	GLX-TPW-412	GLX-TPW-601				GLX-TPW-602				GLX-TPW-603		
						0-3/1.5-2 ft 03/16/2020	0-5/1 ft 02/26/2020	0-4/2-2.5 ft 03/27/2020	0-2/1-2 ft 03/01/2020	0-8 ft 10/20/2019	0-2/2 ft 10/20/2019	2-5/3 ft 10/20/2019	5-8/6 ft 10/20/2019	0-8 ft 10/20/2019	0-2/2 ft 10/20/2019	2-5/4.5 ft 10/20/2019	5-8/6.5 ft 10/20/2019	0-5 ft 10/20/2019	0-2/1.5 ft 10/20/2019	2-5/3 ft 10/20/2019
Analysis	Analyte	Sample Location:	RCS-1	Unlined Landfill**	Lined Landfill**															
	Naphthalene	mg/kg	4	NS	NS	0.16 U	0.0035 U	0.0020 U	14	NA	0.0028 U	0.43 U	0.0030 U	NA	1	93	0.0040 U	NA	0.0027 U	0.0026 U
	n-Propylbenzene	mg/kg	100	NS	NS	0.039 U	0.00087 U	0.00049 U	0.063 U	NA	0.0007 U	0.11 U	0.00076 U	NA	0.056 U	0.47 U	0.0010 U	NA	0.00066 U	0.00065 U
	1,2,3-Trichlorobenzene	mg/kg	NS	NS	NS	0.078 U	0.0017 U	0.00099 U	0.13 U	NA	0.0014 U	0.22 U	0.0015 U	NA	0.11 U	0.94 U	0.0020 U	NA	0.0013 U	0.0013 U
	1,2,4-Trichlorobenzene	mg/kg	2	NS	NS	0.078 U	0.0017 U	0.00099 U	0.13 U	NA	0.0014 U	0.22 U	0.0015 U	NA	0.11 U	0.94 U	0.0020 U	NA	0.0013 U	0.0013 U
	1,3,5-Trimethylbenzene	mg/kg	10	NS	NS	0.078 U	0.0017 U	0.00099 U	0.13 U	NA	0.0014 U	0.22 U	0.0015 U	NA	0.11 U	0.94 U	0.0020 U	NA	0.0013 U	0.0013 U
	1,2,4-Trimethylbenzene	mg/kg	1,000	NS	NS	0.078 U	0.0017 U	0.00099 U	0.13 U	NA	0.0014 U	0.22 U	0.0015 U	NA	0.11 U	1.2	0.0020 U	NA	0.0013 U	0.0013 U
	Ethyl ether	mg/kg	100	NS	NS	0.078 U	0.0017 U	0.00099 U	0.13 U	NA	0.0014 U	0.22 U	0.0015 U	NA	0.11 U	0.94 U	0.0020 U	NA	0.0013 U	0.0013 U
	Isopropyl Ether	mg/kg	100	NS	NS	0.078 U	0.0017 U	0.00099 U	0.13 U	NA	0.0014 U	0.22 U	0.0015 U	NA	0.11 U	0.94 U	0.0020 U	NA	0.0013 U	0.0013 U
	Ethyl-Tert-Butyl-Ether	mg/kg	NS	NS	NS	0.078 U	0.0017 U	0.00099 U	0.13 U	NA	0.0014 U	0.22 U	0.0015 U	NA	0.11 U	0.94 U	0.0020 U	NA	0.0013 U	0.0013 U
	Tertiary-Amyl Methyl Ether	mg/kg	NS	NS	NS	0.078 U	0.0017 U	0.00099 U	0.13 U	NA	0.0014 U	0.22 U	0.0015 U	NA	0.11 U	0.94 U	0.0020 U	NA	0.0013 U	0.0013 U
	1,4-Dioxane	mg/kg	0.2	NS	NS	3.1 U	0.069 U	0.04 U	5.1 U	NA	0.056 U	8.7 U	0.061 U	NA	4.5 U	38 U	0.08 U	NA	0.053 U	0.052 U
	Total VOCs	mg/kg	N/A	4	10	1.15	0.017	0.120	14	NA	0.098	0.70	0.034	NA	1.23	94.2	0.110	NA	0.022	0.027
SVOCs																				
	Acenaphthene	mg/kg	4	NS	NS	0.18	0.15 U	0.74 U	3.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,2,4-Trichlorobenzene	mg/kg	2	NS	NS	0.18 U	0.19 U	0.93 U	0.34 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachlorobenzene	mg/kg	0.7	NS	NS	0.077 U	0.08 U	0.39 U	0.14 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Bis(2-chloroethyl)ether	mg/kg	0.7	NS	NS	0.077 U	0.08 U	0.39 U	0.14 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Chloronaphthalene	mg/kg	1,000	NS	NS	0.18 U	0.19 U	0.93 U	0.34 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,2-Dichlorobenzene	mg/kg	9	NS	NS	0.18 U	0.19 U	0.93 U	0.34 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,3-Dichlorobenzene	mg/kg	3	NS	NS	0.18 U	0.19 U	0.93 U	0.34 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,4-Dichlorobenzene	mg/kg	0.7	NS	NS	0.077 U	0.08 U	0.39 U	0.14 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3,3'-Dichlorobenzidine	mg/kg	3	NS	NS	0.18 U	0.19 U	0.93 U	0.34 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dinitrotoluene	mg/kg	0.7	NS	NS	0.077 U	0.08 U	0.39 U	0.14 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,6-Dinitrotoluene	mg/kg	100	NS	NS	0.18 U	0.19 U	0.93 U	0.34 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Azobenzene	mg/kg	NS	NS	NS	0.18 U	0.19 U	0.93 U	0.34 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	mg/kg	1,000	NS	NS	4.3	0.2	20	9.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Bromophenyl phenyl ether	mg/kg	100	NS	NS	0.18 U	0.19 U	0.93 U	0.34 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Bis(2-chloroisopropyl)ether	mg/kg	0.7	NS	NS	0.077 U	0.08 U	0.39 U	0.14 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Bis(2-chloroethoxy)methane	mg/kg	500	NS	NS	0.2 U	0.2 U	1 U	0.37 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachlorobutadiene	mg/kg	30	NS	NS	0.18 U	0.19 U	0.93 U	0.34 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachloroethane	mg/kg	0.7	NS	NS	0.077 U	0.08 U	0.39 U	0.14 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Isophorone	mg/kg	100	NS	NS	0.16 U	0.17 U	0.84 U	0.31 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	mg/kg	4	NS	NS	0.46	0.19 U	1.3	9.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrobenzene	mg/kg	500	NS	NS	0.16 U	0.17 U	0.84 U	0.31 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Bis(2-Ethylhexyl)phthalate	mg/kg	90	NS	NS	0.18 U	0.19 U	0.93 U	0.34 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Butyl benzyl phthalate	mg/kg	100	NS	NS	0.18 U	0.19 U	0.93 U	0.34 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Di-n-butylphthalate	mg/kg	50	NS	NS	0.18 U	0.19 U	0.93 U	0.34 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Di-n-octylphthalate	mg/kg	1,000	NS	NS	0.18 U	0.19 U	0.93 U	0.34 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Diethyl phthalate	mg/kg	10	NS	NS	0.18 U	0.19 U	0.93 U	0.34 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dimethyl phthalate	mg/kg	0.7	NS	NS	0.077 U	0.08 U	0.39 U	0.14 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	mg/kg	7	NS	NS	2.2	0.11 U	10	4.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	mg/kg	2	NS	NS	1.9	0.15 U	11	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	mg/kg	7	NS	NS	2.2	0.11 U	14	5.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	mg/kg	70	NS	NS	0.71	0.11 U	4.4	1.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chrysene	mg/kg	70	NS	NS	1.8	0.11 U	9.8	3.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthylene	mg/kg	1	NS	NS	0.25	0.15 U	1.6	1.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Anthracene	mg/kg	1,000	NS	NS	0.87	0.11 U	2.1	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(ghi)perylene	mg/kg	1,000	NS	NS	0.89	0.15 U	6.6	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluorene	mg/kg	1,000	NS	NS	0.31	0.19 U	0.93 U	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	mg/kg	10	NS	NS	2.3	0.13	6.1	13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenzo(a,h)anthracene	mg/kg	0.7	NS	NS	0.24	0.08 U	1.5	0.56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)Pyrene	mg/kg	7	NS	NS	1	0.15 U	7.2	2.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pyrene	mg/kg	1,000	NS	NS	3.6	0.17	19	8.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Aniline	mg/kg	1,000	NS	NS	0.22 U	0.23 U	1.1 U	0.41 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Chloroaniline	mg/kg	1	NS	NS	0.18 U	0.19 U	0.93 U	0.34 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenzofuran	mg/kg	100	NS	NS	0.21	0.19 U	0.93 U	3.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Methylnaphthalene	mg/kg	0.7	NS	NS	0.15	0.08 U	0.49	3.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acetophenone	mg/kg	1,000	NS	NS	0.18 U	0.19 U	0.93 U	0.34 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4,6-Trichlorophenol	mg/kg	0.7	NS	NS	0.077 U	0.08 U	0.39 U	0.14 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Chlorophenol	mg/kg	0.7	NS	NS	0.077 U	0.08 U	0.39 U	0.14 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dichlorophenol	mg/kg	0.7	NS	NS	0.077 U	0.08 U	0.39 U	0.14 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dimethylphenol	mg/kg	0.7	NS	NS	0.077 U	0.08 U	0.39 U	0.14 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Nitrophenol	mg/kg	100	NS	NS	0.39 U	0.41 U	2 U	0.74 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Nitrophenol	mg/kg	100	NS	NS	0.26 U	0.26 U	1.3 U	0.48 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 2
Additional Characterization Soil Analytical Results
Green Line Extension Project - Washington Street
Somerville, Massachusetts

Sample Location: Sample Depth^: Sample Date:						GLX-TPW-409	GLX-TPW-410	GLX-TPW-411	GLX-TPW-412	GLX-TPW-601				GLX-TPW-602				GLX-TPW-603		
						0-3/1.5-2 ft 03/16/2020	0-5/1 ft 02/26/2020	0-4/2-2.5 ft 03/27/2020	0-2/1-2 ft 03/01/2020	0-8 ft 10/20/2019	0-2/2 ft 10/20/2019	2-5/3 ft 10/20/2019	5-8/6 ft 10/20/2019	0-8 ft 10/20/2019	0-2/2 ft 10/20/2019	2-5/4.5 ft 10/20/2019	5-8/6.5 ft 10/20/2019	0-5 ft 10/20/2019	0-2/1.5 ft 10/20/2019	2-5/3 ft 10/20/2019
Analysis	Analyte	Sample Location:	RCS-1	Unlined Landfill**	Lined Landfill**															
	2,4-Dinitrophenol	mg/kg	3	NS	NS	0.88 U	0.91 U	4.4 U	1.6 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pentachlorophenol	mg/kg	3	NS	NS	0.36 U	0.38 U	1.8 U	0.68 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenol	mg/kg	1	NS	NS	0.18 U	0.19 U	0.93 U	0.34 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Methylphenol	mg/kg	500	NS	NS	0.18 U	0.19 U	0.93 U	0.34 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3-Methylphenol/4-Methylphenol	mg/kg	NS	NS	NS	0.26 U	0.27 U	1.3 U	0.49 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4,5-Trichlorophenol	mg/kg	4	NS	NS	0.18 U	0.19 U	0.93 U	0.34 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pyridine	mg/kg	500	NS	NS	0.2 U	0.2 U	1 U	0.37 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total SVOCs	mg/kg	N/A	100	100	23.6	0.50	115	85.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pesticides																				
	Delta-BHC	mg/kg	10	NS	NS	0.00174 U	0.00182 U	0.00870 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lindane	mg/kg	0.003	NS	NS	0.000581 U	0.000608 U	0.00290 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alpha-BHC	mg/kg	50	NS	NS	0.000727 U	0.000760 U	0.00362 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Beta-BHC	mg/kg	10	NS	NS	0.00174 U	0.00182 U	0.00870 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Heptachlor	mg/kg	0.3	NS	NS	0.000872 U	0.000912 U	0.00435 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Aldrin	mg/kg	0.08	NS	NS	0.00174 U	0.00182 U	0.00870 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Heptachlor epoxide	mg/kg	0.1	NS	NS	0.00327 U	0.00342 U	0.0163 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Endrin	mg/kg	10	NS	NS	0.000727 U	0.000760 U	0.00362 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Endrin ketone	mg/kg	10	NS	NS	0.00174 U	0.00182 U	0.00870 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dieldrin	mg/kg	0.08	NS	NS	0.00109 U	0.00114 U	0.00544 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4,4'-DDE	mg/kg	6	NS	NS	0.00174 U	0.00182 U	0.00870 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4,4'-DDD	mg/kg	8	NS	NS	0.00174 U	0.00182 U	0.00870 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4,4'-DDT	mg/kg	6	NS	NS	0.00327 U	0.00342 U	0.0320	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Endosulfan I	mg/kg	0.5	NS	NS	0.00174 U	0.00182 U	0.00870 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Endosulfan II	mg/kg	0.5	NS	NS	0.00174 U	0.00182 U	0.00870 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Endosulfan sulfate	mg/kg	0.5	NS	NS	0.000727 U	0.000760 U	0.00362 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Methoxychlor	mg/kg	200	NS	NS	0.00327 U	0.00342 U	0.0163 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chlordane	mg/kg	0.7	NS	NS	0.0145 U	0.0152 U	0.123	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachlorobenzene	mg/kg	0.7	NS	NS	0.00174 U	0.00182 U	0.00870 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Herbicides																				
	MCPP	mg/kg	NS	NS	NS	3.6 U	3.8 U	3.7 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MCPA	mg/kg	100	NS	NS	3.6 U	3.8 U	3.7 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dalapon	mg/kg	1,000	NS	NS	0.036 U	0.038 U	0.037 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dicamba	mg/kg	500	NS	NS	0.036 U	0.038 U	0.037 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dichloroprop	mg/kg	NS	NS	NS	0.036 U	0.038 U	0.037 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-D	mg/kg	100	NS	NS	0.036 U	0.038 U	0.037 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-DB	mg/kg	100	NS	NS	0.036 U	0.038 U	0.037 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4,5-T	mg/kg	100	NS	NS	0.036 U	0.038 U	0.037 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4,5-TP (Silvex)	mg/kg	100	NS	NS	0.036 U	0.038 U	0.037 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCB Aroclors																				
	Aroclor-1016	mg/kg	1	NS	NS	0.0355 U	0.0363 U	0.0367 U	0.0338 U	0.034 U	NA	NA	NA	0.036 U	NA	NA	NA	0.034 U	NA	NA
	Aroclor-1221	mg/kg	1	NS	NS	0.0355 U	0.0363 U	0.0367 U	0.0338 U	0.034 U	NA	NA	NA	0.036 U	NA	NA	NA	0.034 U	NA	NA
	Aroclor-1232	mg/kg	1	NS	NS	0.0355 U	0.0363 U	0.0367 U	0.0338 U	0.034 U	NA	NA	NA	0.036 U	NA	NA	NA	0.034 U	NA	NA
	Aroclor-1242	mg/kg	1	NS	NS	0.0355 U	0.0363 U	0.0367 U	0.0338 U	0.034 U	NA	NA	NA	0.036 U	NA	NA	NA	0.034 U	NA	NA
	Aroclor-1248	mg/kg	1	NS	NS	0.0355 U	0.0363 U	0.0367 U	0.0338 U	0.034 U	NA	NA	NA	0.036 U	NA	NA	NA	0.034 U	NA	NA
	Aroclor-1254	mg/kg	1	NS	NS	0.0355 U	0.0363 U	0.0367 U	0.0338 U	0.034 U	NA	NA	NA	0.036 U	NA	NA	NA	0.034 U	NA	NA
	Aroclor-1260	mg/kg	1	NS	NS	0.0355 U	0.0363 U	0.0886	0.0338 U	0.034 U	NA	NA	NA	0.036 U	NA	NA	NA	0.034 U	NA	NA
	Aroclor-1262	mg/kg	1	NS	NS	0.0355 U	0.0363 U	0.0367 U	0.0338 U	0.034 U	NA	NA	NA	0.036 U	NA	NA	NA	0.034 U	NA	NA
	Aroclor-1268	mg/kg	1	NS	NS	0.0355 U	0.0363 U	0.0367 U	0.0338 U	0.034 U	NA	NA	NA	0.036 U	NA	NA	NA	0.034 U	NA	NA
	PCBs, Total	mg/kg	1	2	2	0.0355 U	0.0363 U	0.0886	0.0338 U	0.034 U	NA	NA	NA	0.036 U	NA	NA	NA	0.034 U	NA	NA
TPH																				
	Total Petroleum Hydrocarbons C10-C36	mg/kg	1,000	2,500	5,000	527	110	1,450	308	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals, total																				
	Antimony	mg/kg	20	NS	NS	NA	NA	2.20 U	NA	2.10 U	NA	NA	NA	3.16	NA	NA	NA	1.98 U	NA	NA
	Arsenic	mg/kg	20	40	40	11.6	3.70	6.45	2.97	10.3	NA	NA	NA	17.3	NA	NA	NA	24.9	NA	NA
	Barium	mg/kg	1,000	NS	NS	30.1	16.6	51.3	18.2	18.4	NA	NA	NA	27.2	NA	NA	NA	16.8	NA	NA
	Beryllium	mg/kg	90	NS	NS	NA	NA	0.366	NA	0.210 U	NA	NA	NA	0.210 U	NA	NA	NA	0.198 U	NA	NA
	Cadmium	mg/kg	70	30	80	1.20	0.598	0.555	0.537	0.421 U	NA	NA	NA	0.822	NA	NA	NA	0.397 U	NA	NA
	Chromium	mg/kg	100	1,000	1,000	22.7	9.97	24.8	11.1	10.1	NA	NA	NA	13.6	NA	NA	NA	8.27	NA	NA
	Lead	mg/kg	200	1,000	2,000	144	71.0	359	46.4	24.8	NA	NA	NA	56.6	NA	NA	NA	21.6	NA	NA
	Mercury	mg/kg	20	10	10	0.082 U	0.082 U	0.175	0.140	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nickel	mg/kg	600	NS	NS	NA	NA	16.2	NA	7.53	NA	NA	NA	11.0	NA	NA	NA	6.64	NA	NA
	Selenium	mg/kg	400	NS	NS	2.12 U	2.28 U	2.20 U	2.02 U	2.10 U	NA	NA	NA	2.10 U	NA	NA	NA	1.98 U	NA	NA
	Silver	mg/kg	100	NS	NS	0.425 U	0.457 U	0.440 U	0.404 U	0.421 U	NA	NA	NA	0.420 U	NA	NA	NA	0.397 U	NA	NA
	Thallium	mg/kg	8	NS	NS	NA	NA	2.20 U	NA	2.10 U	NA	NA	NA	2.10 U	NA	NA	NA	1.98 U	NA	NA

TABLE 2
Additional Characterization Soil Analytical Results
Green Line Extension Project - Washington Street
Somerville, Massachusetts

Sample Location: Sample Depth: Sample Date:						GLX-TPW-409	GLX-TPW-410	GLX-TPW-411	GLX-TPW-412	GLX-TPW-601								GLX-TPW-602								GLX-TPW-603																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
						0-3/1.5-2 ft	0-5/1 ft	0-4/2-2.5 ft	0-2/1-2 ft	0-8 ft		0-2/2 ft		2-5/3 ft		5-8/6 ft		0-8 ft		0-2/2 ft		2-5/4.5 ft		5-8/6.5 ft		0-5 ft		0-2/1.5 ft		2-5/3 ft																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
						03/16/2020	02/26/2020	03/27/2020	03/01/2020	10/20/2019		10/20/2019		10/20/2019		10/20/2019		10/20/2019		10/20/2019		10/20/2019		10/20/2019		10/20/2019		10/20/2019		10/20/2019																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
Analysis	Analyte	Sample Location:	RCS-1	Unlined Landfill**	Lined Landfill**																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															

TABLE 2
Additional Characterization Soil Ananalytical Results
Green Line Extension Project - Washington Street
Somerville, Massachusetts

Sample Location: Sample Depth^: Sample Date:						GLX-TPW-409 0-3/1.5-2 ft 03/16/2020		GLX-TPW-410 0-5/1 ft 02/26/2020		GLX-TPW-411 0-4/2-2.5 ft 03/27/2020		GLX-TPW-412 0-2/1-2 ft 03/01/2020		GLX-TPW-601				GLX-TPW-602				GLX-TPW-603											
														0-8 ft		0-2/2 ft		2-5/3 ft		5-8/6 ft		0-8 ft		0-2/2 ft		2-5/4.5 ft		5-8/6.5 ft		0-5 ft		0-2/1.5 ft	
Analysis	Analyte	Sample Location:	RCS-1	Unlined Landfill**	Lined Landfill**																												
Metals, TCLP																																	
	Lead	mg/L	5*	NS	NS	0.500	U		NA		1.09		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA
General Chemistry																																	
	Ignitability	none	NS	NS	NS	NI			NI		NI		NI		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA
	Specific conductance	umhos/cm	NS	4,000	8,000	120			220		79		300		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA
	pH	su	NS	>2 <12.5	>2 <12.5	9.0			8.1		8.4		9.1		NA		7.1		6.7		6.9		NA		7.6		7.6		6.9		NA		7.8
	Reactive Cyanide	mg/kg	NS	< 250	< 250	10	U		10	U	10	U	10	U	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA
	Reactive Sulfide	mg/kg	NS	< 500	< 500	10	U		10	U	10	U	10	U	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA

Notes:

mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).

mg/L - milligrams per liter.

su - Standard unit.

umhos/cm - Micro-mhos per centimeter.

E - Value exceeds calibration range.

I - The lower value for the two columns has been reported due to obvious interference.

NA - Sample not analyzed for the listed analyte.

N/A - Not available/applicable.

ND - Not detected.

NI - Not ignitable.

NS - No MassDEP standards exist for this analyte.

P - The RPD (relative percent difference) between the results for the two columns exceeds the method-specified criteria.

U - Analyte was not detected at specified quantitation limit.

Values in **bold** indicate the analyte was detected.

Values shown in bold and shaded type are equal to RCS-1 or exceed one or more of the listed MassDEP standards/criteria.

VOCs - Volatile Organic Compounds.

SVOCs - Semivolatile Organic Compounds.

PCBs - Polychlorinated Biphenyls.

TPH - Total Petroleum Hydrocarbons.

TCLP - Toxicity Characteristic Leaching Procedure.

RC - Reportable concentration.

* - EPA SW-846 Chapter 7, Table 7-1, Maximum Concentration of Contaminants for Toxicity Characteristic.

** - Reuse and Disposal of Contaminated Soil at Massachusetts Landfills, MassDEP Policy # COMM-97-001, August 1997.

^ - Sample depth for other/VOCs analysis; otherwise for all the analyses.

TABLE 2
Additional Characterization Soil Analytical Results
Green Line Extension Project - Washington Street
Somerville, Massachusetts

Sample Location: Sample Depth: Sample Date:						GLX-TPW-603A		GLX-TPW-604				GLX-TPW-604A		GLX-TPW-605						GLX-TPW-605A		GLX-TPW-606											
						0-5 ft		0-5 ft		0-2/1 ft		2-5/3 ft		0-5 ft		0-8 ft		0-2/1 ft		2-5/3 ft		3 ft		5-8/8 ft		0-8 ft		0-5 ft		0-2/1 ft		2-5/4 ft	
						02/08/2020		10/20/2019		10/20/2019		10/20/2019		02/08/2020		10/20/2019		10/20/2019		10/20/2019		10/20/2019		10/20/2019		02/08/2020		11/02/2019		11/02/2019		11/02/2019	
Analysis	Analyte	Sample Location:	RCS-1	Unlined Landfill**	Lined Landfill**																	Field Dup											
VOCs																																	
	Methylene chloride	mg/kg	0.1	NS	NS	NA		NA		0.0034	U	0.0045	U	NA		NA		0.0041	U	0.0047	U	0.0050	U	0.0036	U	NA		NA		0.0040	U	0.0024	U
	1,1-Dichloroethane	mg/kg	0.4	NS	NS	NA		NA		0.00068	U	0.00089	U	NA		NA		0.00081	U	0.00094	U	0.0010	U	0.00072	U	NA		NA		0.00080	U	0.00048	U
	Chloroform	mg/kg	0.2	NS	NS	NA		NA		0.0010	U	0.0013	U	NA		NA		0.0012	U	0.0014	U	0.0015	U	0.0011	U	NA		NA		0.0012	U	0.00072	U
	Carbon tetrachloride	mg/kg	5	NS	NS	NA		NA		0.00068	U	0.00089	U	NA		NA		0.00081	U	0.00094	U	0.0010	U	0.00072	U	NA		NA		0.00080	U	0.00048	U
	1,2-Dichloropropane	mg/kg	0.1	NS	NS	NA		NA		0.00068	U	0.00089	U	NA		NA		0.00081	U	0.00094	U	0.0010	U	0.00072	U	NA		NA		0.00080	U	0.00048	U
	Dibromochloromethane	mg/kg	0.005	NS	NS	NA		NA		0.00068	U	0.00089	U	NA		NA		0.00081	U	0.00094	U	0.0010	U	0.00072	U	NA		NA		0.00080	U	0.00048	U
	1,1,2-Trichloroethane	mg/kg	0.1	NS	NS	NA		NA		0.00068	U	0.00089	U	NA		NA		0.00081	U	0.00094	U	0.0010	U	0.00072	U	NA		NA		0.00080	U	0.00048	U
	Tetrachloroethene	mg/kg	1	NS	NS	NA		NA		0.00034	U	0.00045	U	NA		NA		0.00041	U	0.00047	U	0.00050	U	0.00036	U	NA		NA		0.00040	U	0.00024	U
	Chlorobenzene	mg/kg	1	NS	NS	NA		NA		0.00034	U	0.00045	U	NA		NA		0.00041	U	0.00047	U	0.00050	U	0.00036	U	NA		NA		0.00040	U	0.00024	U
	Trichlorofluoromethane	mg/kg	1,000	NS	NS	NA		NA		0.0027	U	0.0036	U	NA		NA		0.0032	U	0.0038	U	0.0040	U	0.0029	U	NA		NA		0.0032	U	0.0019	U
	1,2-Dichloroethane	mg/kg	0.1	NS	NS	NA		NA		0.00068	U	0.00089	U	NA		NA		0.00081	U	0.00094	U	0.0010	U	0.00072	U	NA		NA		0.00080	U	0.00048	U
	1,1,1-Trichloroethane	mg/kg	30	NS	NS	NA		NA		0.00034	U	0.00045	U	NA		NA		0.00041	U	0.00047	U	0.00050	U	0.00036	U	NA		NA		0.00040	U	0.00024	U
	Bromodichloromethane	mg/kg	0.1	NS	NS	NA		NA		0.00034	U	0.00045	U	NA		NA		0.00041	U	0.00047	U	0.00050	U	0.00036	U	NA		NA		0.00040	U	0.00024	U
	trans-1,3-Dichloropropene	mg/kg	0.01	NS	NS	NA		NA		0.00068	U	0.00089	U	NA		NA		0.00081	U	0.00094	U	0.0010	U	0.00072	U	NA		NA		0.00080	U	0.00048	U
	cis-1,3-Dichloropropene	mg/kg	0.01	NS	NS	NA		NA		0.00034	U	0.00045	U	NA		NA		0.00041	U	0.00047	U	0.00050	U	0.00036	U	NA		NA		0.00040	U	0.00024	U
	1,3-Dichloropropene, Total	mg/kg	0.01	NS	NS	NA		NA		0.00034	U	0.00045	U	NA		NA		0.00041	U	0.00047	U	0.00050	U	0.00036	U	NA		NA		0.00040	U	0.00024	U
	1,1-Dichloropropene	mg/kg	0.01	NS	NS	NA		NA		0.00034	U	0.00045	U	NA		NA		0.00041	U	0.00047	U	0.00050	U	0.00036	U	NA		NA		0.00040	U	0.00024	U
	Bromoform	mg/kg	0.1	NS	NS	NA		NA		0.0027	U	0.0036	U	NA		NA		0.0032	U	0.0038	U	0.0040	U	0.0029	U	NA		NA		0.0032	U	0.0019	U
	1,1,2,2-Tetrachloroethane	mg/kg	0.005	NS	NS	NA		NA		0.00034	U	0.00045	U	NA		NA		0.00041	U	0.00047	U	0.00050	U	0.00036	U	NA		NA		0.00040	U	0.00024	U
	Benzene	mg/kg	2	NS	NS	NA		NA		0.00034	U	0.00061		NA		NA		0.00041	U	0.00047	U	0.00050	U	0.00036	U	NA		NA		0.00040	U	0.00024	U
	Toluene	mg/kg	30	NS	NS	NA		NA		0.00068	U	0.00089	U	NA		NA		0.00081	U	0.00094	U	0.0010	U	0.00072	U	NA		NA		0.00080	U	0.00048	U
	Ethylbenzene	mg/kg	40	NS	NS	NA		NA		0.00068	U	0.00089	U	NA		NA		0.00081	U	0.00094	U	0.0010	U	0.00072	U	NA		NA		0.00080	U	0.00048	U
	Chloromethane	mg/kg	100	NS	NS	NA		NA		0.0027	U	0.0036	U	NA		NA		0.0032	U	0.0038	U	0.0040	U	0.0029	U	NA		NA		0.0032	U	0.0019	U
	Bromomethane	mg/kg	0.5	NS	NS	NA		NA		0.0014	U	0.0018	U	NA		NA		0.0016	U	0.0019	U	0.0020	U	0.0014	U	NA		NA		0.0016	U	0.00096	U
	Vinyl chloride	mg/kg	0.7	NS	NS	NA		NA		0.00068	U	0.00089	U	NA		NA		0.00081	U	0.00094	U	0.0010	U	0.00072	U	NA		NA		0.00080	U	0.00048	U
	Chloroethane	mg/kg	100	NS	NS	NA		NA		0.0014	U	0.0018	U	NA		NA		0.0016	U	0.0019	U	0.0020	U	0.0014	U	NA		NA		0.0016	U	0.00096	U
	1,1-Dichloroethene	mg/kg	3	NS	NS	NA		NA		0.00068	U	0.00089	U	NA		NA		0.00081	U	0.00094	U	0.0010	U	0.00072	U	NA		NA		0.00080	U	0.00048	U
	trans-1,2-Dichloroethene	mg/kg	1	NS	NS	NA		NA		0.0010	U	0.0013	U	NA		NA		0.0012	U	0.0014	U	0.0015	U	0.0011	U	NA		NA		0.0012	U	0.00072	U
	Trichloroethene	mg/kg	0.3	NS	NS	NA		NA		0.00034	U	0.00045	U	NA		NA		0.00041	U	0.00047	U	0.00050	U	0.00036	U	NA		NA		0.00040	U	0.00024	U
	1,2-Dichlorobenzene	mg/kg	9	NS	NS	NA		NA		0.0014	U	0.0018	U	NA		NA		0.0016	U	0.0019	U	0.0020	U	0.0014	U	NA		NA		0.0016	U	0.00096	U
	1,3-Dichlorobenzene	mg/kg	3	NS	NS	NA		NA		0.0014	U	0.0018	U	NA		NA		0.0016	U	0.0019	U	0.0020	U	0.0014	U	NA		NA		0.0016	U	0.00096	U
	1,4-Dichlorobenzene	mg/kg	0.7	NS	NS	NA		NA		0.0014	U	0.0018	U	NA		NA		0.0016	U	0.0019	U	0.0020	U	0.0014	U	NA		NA		0.0016	U	0.00096	U
	Methyl tert butyl ether	mg/kg	0.1	NS	NS	NA		NA		0.0014	U	0.0018	U	NA		NA		0.0016	U	0.0019	U	0.0020	U	0.0014	U	NA		NA		0.0016	U	0.00096	U
	p/m-Xylene	mg/kg	100	NS	NS	NA		NA		0.0014	U	0.0018	U	NA		NA		0.0016	U	0.0019	U	0.0.											

TABLE 2
Additional Characterization Soil Analytical Results
Green Line Extension Project - Washington Street
Somerville, Massachusetts

Sample Location: Sample Depth: Sample Date:						GLX-TPW-603A	GLX-TPW-604				GLX-TPW-604A	GLX-TPW-605						GLX-TPW-605A	GLX-TPW-606																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
						0-5 ft	0-5 ft		0-2/1 ft	2-5/3 ft	0-5 ft	0-8 ft	0-2/1 ft	2-5/3 ft	3 ft	5-8/8 ft	0-8 ft	0-5 ft	0-2/1 ft	2-5/4 ft																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
						02/08/2020	10/20/2019	10/20/2019	10/20/2019	02/08/2020	10/20/2019	10/20/2019	10/20/2019	10/20/2019	10/20/2019	10/20/2019	02/08/2020	11/02/2019	11/02/2019	11/02/2019																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
Analysis	Analyte	Sample Location:	RCS-1	Unlined Landfill**	Lined Landfill**										Field Dup																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					

TABLE 2
Additional Characterization Soil Analytical Results
Green Line Extension Project - Washington Street
Somerville, Massachusetts

Sample Location: Sample Depth^: Sample Date:						GLX-TPW- 603A	GLX-TPW-604				GLX-TPW- 604A	GLX-TPW-605						GLX-TPW- 605A	GLX-TPW-606		
						0-5 ft 02/08/2020	0-5 ft 10/20/2019	0-2/1 ft 10/20/2019	2-5/3 ft 10/20/2019		0-5 ft 02/08/2020	0-8 ft 10/20/2019	0-2/1 ft 10/20/2019	2-5/3 ft 10/20/2019	3 ft 10/20/2019	5-8/8 ft 10/20/2019		0-8 ft 02/08/2020	0-5 ft 11/02/2019	0-2/1 ft 11/02/2019	2-5/4 ft 11/02/2019
Analysis	Analyte	Sample Location:	RCS-1	Unlined Landfill**	Lined Landfill**										Field Dup						
	2,4-Dinitrophenol	mg/kg	3	NS	NS	0.82	U	NA	NA	NA	0.85	U	NA	NA	NA	NA		0.9	U	NA	NA
	Pentachlorophenol	mg/kg	3	NS	NS	0.34	U	NA	NA	NA	0.35	U	NA	NA	NA	NA		0.38	U	NA	NA
	Phenol	mg/kg	1	NS	NS	0.17	U	NA	NA	NA	0.18	U	NA	NA	NA	NA		0.19	U	NA	NA
	2-Methylphenol	mg/kg	500	NS	NS	0.17	U	NA	NA	NA	0.18	U	NA	NA	NA	NA		0.19	U	NA	NA
	3-Methylphenol/4-Methylphenol	mg/kg	NS	NS	NS	0.24	U	NA	NA	NA	0.25	U	NA	NA	NA	NA		0.27	U	NA	NA
	2,4,5-Trichlorophenol	mg/kg	4	NS	NS	0.17	U	NA	NA	NA	0.18	U	NA	NA	NA	NA		0.19	U	NA	NA
	Pyridine	mg/kg	500	NS	NS	0.18	U	NA	NA	NA	0.19	U	NA	NA	NA	NA		0.2	U	NA	NA
	Total SVOCs	mg/kg	N/A	100	100	ND		NA	NA	NA	0.780		NA	NA	NA	NA		74.2		NA	NA
Pesticides																					
	Delta-BHC	mg/kg	10	NS	NS	NA		NA	NA	NA	NA		NA	NA	NA	NA		NA		NA	NA
	Lindane	mg/kg	0.003	NS	NS	NA		NA	NA	NA	NA		NA	NA	NA	NA		NA		NA	NA
	Alpha-BHC	mg/kg	50	NS	NS	NA		NA	NA	NA	NA		NA	NA	NA	NA		NA		NA	NA
	Beta-BHC	mg/kg	10	NS	NS	NA		NA	NA	NA	NA		NA	NA	NA	NA		NA		NA	NA
	Heptachlor	mg/kg	0.3	NS	NS	NA		NA	NA	NA	NA		NA	NA	NA	NA		NA		NA	NA
	Aldrin	mg/kg	0.08	NS	NS	NA		NA	NA	NA	NA		NA	NA	NA	NA		NA		NA	NA
	Heptachlor epoxide	mg/kg	0.1	NS	NS	NA		NA	NA	NA	NA		NA	NA	NA	NA		NA		NA	NA
	Endrin	mg/kg	10	NS	NS	NA		NA	NA	NA	NA		NA	NA	NA	NA		NA		NA	NA
	Endrin ketone	mg/kg	10	NS	NS	NA		NA	NA	NA	NA		NA	NA	NA	NA		NA		NA	NA
	Dieldrin	mg/kg	0.08	NS	NS	NA		NA	NA	NA	NA		NA	NA	NA	NA		NA		NA	NA
	4,4'-DDE	mg/kg	6	NS	NS	NA		NA	NA	NA	NA		NA	NA	NA	NA		NA		NA	NA
	4,4'-DDD	mg/kg	8	NS	NS	NA		NA	NA	NA	NA		NA	NA	NA	NA		NA		NA	NA
	4,4'-DDT	mg/kg	6	NS	NS	NA		NA	NA	NA	NA		NA	NA	NA	NA		NA		NA	NA
	Endosulfan I	mg/kg	0.5	NS	NS	NA		NA	NA	NA	NA		NA	NA	NA	NA		NA		NA	NA
	Endosulfan II	mg/kg	0.5	NS	NS	NA		NA	NA	NA	NA		NA	NA	NA	NA		NA		NA	NA
	Endosulfan sulfate	mg/kg	0.5	NS	NS	NA		NA	NA	NA	NA		NA	NA	NA	NA		NA		NA	NA
	Methoxychlor	mg/kg	200	NS	NS	NA		NA	NA	NA	NA		NA	NA	NA	NA		NA		NA	NA
	Chlordane	mg/kg	0.7	NS	NS	NA		NA	NA	NA	NA		NA	NA	NA	NA		NA		NA	NA
	Hexachlorobenzene	mg/kg	0.7	NS	NS	NA		NA	NA	NA	NA		NA	NA	NA	NA		NA		NA	NA
Herbicides																					
	MCPP	mg/kg	NS	NS	NS	NA		NA	NA	NA	NA		NA	NA	NA	NA		NA		NA	NA
	MCPA	mg/kg	100	NS	NS	NA		NA	NA	NA	NA		NA	NA	NA	NA		NA		NA	NA
	Dalapon	mg/kg	1,000	NS	NS	NA		NA	NA	NA	NA		NA	NA	NA	NA		NA		NA	NA
	Dicamba	mg/kg	500	NS	NS	NA		NA	NA	NA	NA		NA	NA	NA	NA		NA		NA	NA
	Dichloroprop	mg/kg	NS	NS	NS	NA		NA	NA	NA	NA		NA	NA	NA	NA		NA		NA	NA
	2,4-D	mg/kg	100	NS	NS	NA		NA	NA	NA	NA		NA	NA	NA	NA		NA		NA	NA
	2,4-DB	mg/kg	100	NS	NS	NA		NA	NA	NA	NA		NA	NA	NA	NA		NA		NA	NA
	2,4,5-T	mg/kg	100	NS	NS	NA		NA	NA	NA	NA		NA	NA	NA	NA		NA		NA	NA
	2,4,5-TP (Silvex)	mg/kg	100	NS	NS	NA		NA	NA	NA	NA		NA	NA	NA	NA		NA		NA	NA
PCB Aroclors																					
	Aroclor-1016	mg/kg	1	NS	NS	NA		0.035	U	NA	NA		0.037	U	NA	NA		NA		0.0349	U
	Aroclor-1221	mg/kg	1	NS	NS	NA		0.035	U	NA	NA		0.037	U	NA	NA		NA		0.0349	U
	Aroclor-1232	mg/kg	1	NS	NS	NA		0.035	U	NA	NA		0.037	U	NA	NA		NA		0.0349	U
	Aroclor-1242	mg/kg	1	NS	NS	NA		0.035	U	NA	NA		0.037	U	NA	NA		NA		0.0349	U
	Aroclor-1248	mg/kg	1	NS	NS	NA		0.035	U	NA	NA		0.037	U	NA	NA		NA		0.0349	U
	Aroclor-1254	mg/kg	1	NS	NS	NA		0.035	U	NA	NA		0.037	U	NA	NA		NA		0.0349	U
	Aroclor-1260	mg/kg	1	NS	NS	NA		0.035	U	NA	NA		0.037	U	NA	NA		NA		0.0349	U
	Aroclor-1262	mg/kg	1	NS	NS	NA		0.035	U	NA	NA		0.037	U	NA	NA		NA		0.0349	U
	Aroclor-1268	mg/kg	1	NS	NS	NA		0.035	U	NA	NA		0.037	U	NA	NA		NA		0.0349	U
	PCBs, Total	mg/kg	1	2	2	NA		0.035	U	NA	NA		0.037	U	NA	NA		NA		0.0349	U
TPH																					
	Total Petroleum Hydrocarbons C10-C36	mg/kg	1,000	2,500	5,000	34	U	NA	NA	NA	56.4		NA	NA	NA	NA		390		NA	NA
Metals, total																					
	Antimony	mg/kg	20	NS	NS	NA		1.99	U	NA	NA		2.14	U	NA	NA		NA		2.11	U
	Arsenic	mg/kg	20	40	40	NA		10.5		NA	NA		6.98		NA	NA		NA		6.58	
	Barium	mg/kg	1,000	NS	NS	NA		28.7		NA	NA		29.3		NA	NA		NA		35.6	
	Beryllium	mg/kg	90	NS	NS	NA		0.199	U	NA	NA		0.214	U	NA	NA		NA		0.211	U
	Cadmium	mg/kg	70	30	80	NA		0.399	U	NA	NA		0.428	U	NA	NA		NA		0.422	U
	Chromium	mg/kg	100	1,000	1,000	NA		15.0		NA	NA		15.3		NA	NA		NA		15.2	
	Lead	mg/kg	200	1,000	2,000	NA		14.3		NA	NA		15.4		NA	NA		NA		25.6	
	Mercury	mg/kg	20	10	10	0.079	U	NA	NA	NA	0.074	U	NA	NA	NA	NA		0.088		NA	NA
	Nickel	mg/kg	600	NS	NS	NA		9.62		NA	NA		9.41		NA	NA		NA		11.2	
	Selenium	mg/kg	400	NS	NS	NA		1.99	U	NA	NA		2.14	U	NA	NA		NA		2.11	U
	Silver	mg/kg	100	NS	NS	NA		0.399	U	NA	NA		0.428	U	NA	NA		NA		0.422	U
	Thallium	mg/kg	8	NS	NS	NA		1.99	U	NA	NA		2.14	U	NA	NA		NA		2.11	U

TABLE 2
Additional Characterization Soil Analytical Results
Green Line Extension Project - Washington Street
Somerville, Massachusetts

Sample Location: Sample Depth^: Sample Date:						GLX-TPW-603A	GLX-TPW-604			GLX-TPW-604A	GLX-TPW-605					GLX-TPW-605A	GLX-TPW-606			
						0-5 ft	0-5 ft	0-2/1 ft	2-5/3 ft	0-5 ft	0-8 ft	0-2/1 ft	2-5/3 ft	3 ft	5-8/8 ft	0-8 ft	0-5 ft	0-2/1 ft	2-5/4 ft	
						02/08/2020	10/20/2019	10/20/2019	10/20/2019	02/08/2020	10/20/2019	10/20/2019	10/20/2019	10/20/2019	10/20/2019	02/08/2020	11/02/2019	11/02/2019	11/02/2019	
Analysis	Analyte	Sample Location:	RCS-1	Unlined Landfill**	Lined Landfill**										Field Dup					
	Vanadium	mg/kg	400	NS	NS	NA	12.0	NA	NA	NA	14.2	NA	NA	NA	NA	NA	17.5	NA	NA	NA
	Zinc	mg/kg	1,000	NS	NS	NA	33.3	NA	NA	NA	38.5	NA	NA	NA	NA	NA	35.5	NA	NA	NA

TABLE 2
Additional Characterization Soil Ananalytical Results
Green Line Extension Project - Washington Street
Somerville, Massachusetts

Sample Location: Sample Depth^: Sample Date:						GLX-TPW-603A		GLX-TPW-604				GLX-TPW-604A		GLX-TPW-605								GLX-TPW-605A		GLX-TPW-606							
						0-5 ft		0-2/1 ft		2-5/3 ft		0-5 ft		0-8 ft		0-2/1 ft		2-5/3 ft		3 ft		5-8/8 ft		0-8 ft		0-5 ft		0-2/1 ft		2-5/4 ft	
						02/08/2020		10/20/2019		10/20/2019		10/20/2019		02/08/2020		10/20/2019		10/20/2019		10/20/2019		10/20/2019		02/08/2020		11/02/2019		11/02/2019		11/02/2019	
Analysis	Analyte	Sample Location:	RCS-1	Unlined Landfill**	Lined Landfill**														Field Dup												
Metals, TCLP																															
	Lead	mg/L	5*	NS	NS	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA			
General Chemistry																															
	Ignitability	none	NS	NS	NS	NI		NA		NA		NI		NA		NA		NA		NA		NA		NA		NA		NA			
	Specific conductance	umhos/cm	NS	4,000	8,000	13		NA		NA		11		NA		NA		NA		NA		13		NA		NA		NA			
	pH	su	NS	>2 <12.5	>2 <12.5	7.7		NA		7.5		6.9		NA		7.5		6.6		NA		5.5		7.2		NA		6.8		6.4	
	Reactive Cyanide	mg/kg	NS	< 250	< 250	10	U	NA		NA		10	U	NA		NA		NA		NA		10	U	NA		NA		NA		NA	
	Reactive Sulfide	mg/kg	NS	< 500	< 500	10	U	NA		NA		10	U	NA		NA		NA		NA		10	U	NA		NA		NA		NA	

Notes:

mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).

mg/L - milligrams per liter.

su - Standard unit.

umhos/cm - Micro-mhos per centimeter.

E - Value exceeds calibration range.

I - The lower value for the two columns has been reported due to obvious interference.

NA - Sample not analyzed for the listed analyte.

N/A - Not available/applicable.

ND - Not detected.

NI - Not ignitable.

NS - No MassDEP standards exist for this analyte.

P - The RPD (relative percent difference) between the results for the two columns exceeds the method-specified criteria.

U - Analyte was not detected at specified quantitation limit.

Values in **bold** indicate the analyte was detected.

Values shown in bold and shaded type are equal to RCS-1 or exceed one or more of the listed MassDEP standards/criteria.

VOCs - Volatile Organic Compounds.

SVOCs - Semivolatile Organic Compounds.

PCBs - Polychlorinated Biphenyls.

TPH - Total Petroleum Hydrocarbons.

TCLP - Toxicity Characteristic Leaching Procedure.

RC - Reportable concentration.

* - EPA SW-846 Chapter 7, Table 7-1, Maximum Concentration of Contaminants for Toxicity Characteristic.

** - Reuse and Disposal of Contaminated Soil at Massachusetts Landfills, MassDEP Policy # COMM-97-001, August 1997.

^ - Sample depth for other/VOCs analysis; otherwise for all the analyses.

TABLE 2
Additional Characterization Soil Analytical Results
Green Line Extension Project - Washington Street
Somerville, Massachusetts

Sample Location: Sample Depth: Sample Date:						GLX-TPW-606A		GLX-TPW-607				GLX-TPW-607A				GLX-TPW-608			GLX-TPW-608A		GLX-TPW-609			GLX-TPW-609A								
						0-5 ft		0-5 ft		0-2/0.6 ft		2-5/4.6 ft		0-5 ft		0-5 ft		0-5 ft		0-5 ft		0-5 ft		0-5 ft		0-5 ft						
						02/08/2020		10/20/2019		10/20/2019		10/20/2019		02/08/2020		02/08/2020		11/02/2019		11/02/2019		11/02/2019		02/08/2020		11/02/2019		11/02/2019		11/02/2019		02/08/2020
Analysis	Analyte	Sample Location:	RCS-1	Unlined Landfill**	Lined Landfill**																											
VOCs																																
	Methylene chloride	mg/kg	0.1	NS	NS	NA		NA		0.0038	U	0.0039	U	NA		NA		NA		0.0035	U	0.0047	U	NA		NA		0.0034	U	0.0032	U	NA
	1,1-Dichloroethane	mg/kg	0.4	NS	NS	NA		NA		0.00075	U	0.00078	U	NA		NA		NA		0.00071	U	0.00094	U	NA		NA		0.00069	U	0.00064	U	NA
	Chloroform	mg/kg	0.2	NS	NS	NA		NA		0.0011	U	0.0012	U	NA		NA		NA		0.0011	U	0.0014	U	NA		NA		0.001	U	0.00096	U	NA
	Carbon tetrachloride	mg/kg	5	NS	NS	NA		NA		0.00075	U	0.00078	U	NA		NA		NA		0.00071	U	0.00094	U	NA		NA		0.00069	U	0.00064	U	NA
	1,2-Dichloropropane	mg/kg	0.1	NS	NS	NA		NA		0.00075	U	0.00078	U	NA		NA		NA		0.00071	U	0.00094	U	NA		NA		0.00069	U	0.00064	U	NA
	Dibromochloromethane	mg/kg	0.005	NS	NS	NA		NA		0.00075	U	0.00078	U	NA		NA		NA		0.00071	U	0.00094	U	NA		NA		0.00069	U	0.00064	U	NA
	1,1,2-Trichloroethane	mg/kg	0.1	NS	NS	NA		NA		0.00075	U	0.00078	U	NA		NA		NA		0.00071	U	0.00094	U	NA		NA		0.00069	U	0.00064	U	NA
	Tetrachloroethene	mg/kg	1	NS	NS	NA		NA		0.00038	U	0.00039	U	NA		NA		NA		0.00035	U	0.00047	U	NA		NA		0.00034	U	0.00032	U	NA
	Chlorobenzene	mg/kg	1	NS	NS	NA		NA		0.00038	U	0.00039	U	NA		NA		NA		0.00035	U	0.00047	U	NA		NA		0.00034	U	0.00032	U	NA
	Trichlorofluoromethane	mg/kg	1,000	NS	NS	NA		NA		0.0030	U	0.0031	U	NA		NA		NA		0.0028	U	0.0037	U	NA		NA		0.0027	U	0.0026	U	NA
	1,2-Dichloroethane	mg/kg	0.1	NS	NS	NA		NA		0.00075	U	0.00078	U	NA		NA		NA		0.00071	U	0.00094	U	NA		NA		0.00069	U	0.00064	U	NA
	1,1,1-Trichloroethane	mg/kg	30	NS	NS	NA		NA		0.00038	U	0.00039	U	NA		NA		NA		0.00035	U	0.00047	U	NA		NA		0.00034	U	0.00032	U	NA
	Bromodichloromethane	mg/kg	0.1	NS	NS	NA		NA		0.00038	U	0.00039	U	NA		NA		NA		0.00035	U	0.00047	U	NA		NA		0.00034	U	0.00032	U	NA
	trans-1,3-Dichloropropene	mg/kg	0.01	NS	NS	NA		NA		0.00075	U	0.00078	U	NA		NA		NA		0.00071	U	0.00094	U	NA		NA		0.00069	U	0.00064	U	NA
	cis-1,3-Dichloropropene	mg/kg	0.01	NS	NS	NA		NA		0.00038	U	0.00039	U	NA		NA		NA		0.00035	U	0.00047	U	NA		NA		0.00034	U	0.00032	U	NA
	1,3-Dichloropropene, Total	mg/kg	0.01	NS	NS	NA		NA		0.00038	U	0.00039	U	NA		NA		NA		0.00035	U	0.00047	U	NA		NA		0.00034	U	0.00032	U	NA
	1,1-Dichloropropene	mg/kg	0.01	NS	NS	NA		NA		0.00038	U	0.00039	U	NA		NA		NA		0.00035	U	0.00047	U	NA		NA		0.00034	U	0.00032	U	NA
	Bromoform	mg/kg	0.1	NS	NS	NA		NA		0.0030	U	0.0031	U	NA		NA		NA		0.0028	U	0.0037	U	NA		NA		0.0027	U	0.0026	U	NA
	1,1,2,2-Tetrachloroethane	mg/kg	0.005	NS	NS	NA		NA		0.00038	U	0.00039	U	NA		NA		NA		0.00035	U	0.00047	U	NA		NA		0.00034	U	0.00032	U	NA
	Benzene	mg/kg	2	NS	NS	NA		NA		0.00038	U	0.00039	U	NA		NA		NA		0.00035	U	0.00047	U	NA		NA		0.00034	U	0.00032	U	NA
	Toluene	mg/kg	30	NS	NS	NA		NA		0.00075	U	0.00078	U	NA		NA		NA		0.00071	U	0.00094	U	NA		NA		0.00069	U	0.00064	U	NA
	Ethylbenzene	mg/kg	40	NS	NS	NA		NA		0.00075	U	0.00078	U	NA		NA		NA		0.00071	U	0.00094	U	NA		NA		0.00069	U	0.00064	U	NA
	Chloromethane	mg/kg	100	NS	NS	NA		NA		0.0030	U	0.0031	U	NA		NA		NA		0.0028	U	0.0037	U	NA		NA		0.0027	U	0.0026	U	NA
	Bromomethane	mg/kg	0.5	NS	NS	NA		NA		0.0015	U	0.0016	U	NA		NA		NA		0.0014	U	0.0019	U	NA		NA		0.0014	U	0.0013	U	NA
	Vinyl chloride	mg/kg	0.7	NS	NS	NA		NA		0.00075	U	0.00078	U	NA		NA		NA		0.00071	U	0.00094	U	NA		NA		0.00069	U	0.00064	U	NA
	Chloroethane	mg/kg	100	NS	NS	NA		NA		0.0015	U	0.0016	U	NA		NA		NA		0.0014	U	0.0019	U	NA		NA		0.0014	U	0.0013	U	NA
	1,1-Dichloroethene	mg/kg	3	NS	NS	NA		NA		0.00075	U	0.00078	U	NA		NA		NA		0.00071	U	0.00094	U	NA		NA		0.00069	U	0.00064	U	NA
	trans-1,2-Dichloroethene	mg/kg	1	NS	NS	NA		NA		0.0011	U	0.0012	U	NA		NA		NA		0.0011	U	0.0014	U	NA		NA		0.001	U	0.00096	U	NA
	Trichloroethene	mg/kg	0.3	NS	NS	NA		NA		0.00038	U	0.00039	U	NA		NA		NA		0.00035	U	0.00047	U	NA		NA		0.00034	U	0.00032	U	NA
	1,2-Dichlorobenzene	mg/kg	9	NS	NS	NA		NA		0.0015	U	0.0016	U	NA		NA		NA		0.0014	U	0.0019	U	NA		NA		0.0014	U	0.0013	U	NA
	1,3-Dichlorobenzene	mg/kg	3	NS	NS	NA		NA		0.0015	U	0.0016	U	NA		NA		NA		0.0014	U	0.0019	U	NA		NA		0.0014	U	0.0013	U	NA
	1,4-Dichlorobenzene	mg/kg	0.7	NS	NS	NA		NA		0.0015	U	0.0016	U	NA		NA		NA		0.0014	U	0.0019	U	NA		NA		0.0014	U	0.0013	U	NA
	Methyl tert butyl ether	mg/kg	0.1	NS	NS	NA		NA		0.0015	U	0.0016	U	NA		NA		NA		0.0014	U	0.0019	U	NA		NA		0.0014	U	0.0013	U	NA
	p/m-Xylene	mg/kg	100	NS	NS	NA		NA		0.0015	U	0.0016	U	NA		NA		NA		0.0014	U	0.0019	U	NA		NA		0.0014	U	0.0013	U	NA
	o-Xylene	mg/kg	100	NS	NS	NA		NA		0.00075	U	0.00078	U	NA		NA		NA		0.00071	U	0.00094	U	NA		NA						

TABLE 2
Additional Characterization Soil Analytical Results
Green Line Extension Project - Washington Street
Somerville, Massachusetts

Sample Location: Sample Depth^: Sample Date:						GLX-TPW- 606A	GLX-TPW-607				GLX-TPW-607A		GLX-TPW-608			GLX-TPW- 608A	GLX-TPW-609			GLX-TPW- 609A
						0-5 ft 02/08/2020	0-5 ft 10/20/2019	0-2/0.6 ft 10/20/2019	2-5/4.6 ft 10/20/2019		0-5 ft 02/08/2020	0-5 ft 02/08/2020	0-5 ft 11/02/2019	0-2/1 ft 11/02/2019	2-5/4 ft 11/02/2019	0-5 ft 02/08/2020	0-5 ft 11/02/2019	0-2/1 ft 11/02/2019	2-5/4 ft 11/02/2019	0-5 ft 02/08/2020
Analysis	Analyte	Sample Location:	RCS-1	Unlined Landfill**	Lined Landfill**						Field Dup									
	Naphthalene	mg/kg	4	NS	NS	NA	NA	0.0030	U	0.0031	U	NA	NA	NA	0.0028	U	0.0037	U	NA	NA
	n-Propylbenzene	mg/kg	100	NS	NS	NA	NA	0.00075	U	0.00078	U	NA	NA	NA	0.00071	U	0.00094	U	NA	NA
	1,2,3-Trichlorobenzene	mg/kg	NS	NS	NS	NA	NA	0.0015	U	0.0016	U	NA	NA	NA	0.0014	U	0.0019	U	NA	NA
	1,2,4-Trichlorobenzene	mg/kg	2	NS	NS	NA	NA	0.0015	U	0.0016	U	NA	NA	NA	0.0014	U	0.0019	U	NA	NA
	1,3,5-Trimethylbenzene	mg/kg	10	NS	NS	NA	NA	0.0015	U	0.0016	U	NA	NA	NA	0.0014	U	0.0019	U	NA	NA
	1,2,4-Trimethylbenzene	mg/kg	1,000	NS	NS	NA	NA	0.0015	U	0.0016	U	NA	NA	NA	0.0014	U	0.0019	U	NA	NA
	Ethyl ether	mg/kg	100	NS	NS	NA	NA	0.0015	U	0.0016	U	NA	NA	NA	0.0014	U	0.0019	U	NA	NA
	Isopropyl Ether	mg/kg	100	NS	NS	NA	NA	0.0015	U	0.0016	U	NA	NA	NA	0.0014	U	0.0019	U	NA	NA
	Ethyl-Tert-Butyl-Ether	mg/kg	NS	NS	NS	NA	NA	0.0015	U	0.0016	U	NA	NA	NA	0.0014	U	0.0019	U	NA	NA
	Tertiary-Amyl Methyl Ether	mg/kg	NS	NS	NS	NA	NA	0.0015	U	0.0016	U	NA	NA	NA	0.0014	U	0.0019	U	NA	NA
	1,4-Dioxane	mg/kg	0.2	NS	NS	NA	NA	0.06	U	0.063	U	NA	NA	NA	0.057	U	0.075	U	NA	NA
	Total VOCs	mg/kg	N/A	4	10	NA	NA	0.066		0.030		NA	NA	NA	0.020		0.053		NA	NA
SVOCs																				
	Acenaphthene	mg/kg	4	NS	NS	0.2	NA	NA	NA	0.15	U	0.15	U	NA	NA	NA	0.14	U	NA	NA
	1,2,4-Trichlorobenzene	mg/kg	2	NS	NS	0.18	U	NA	NA	0.19	U	0.18	U	NA	NA	NA	0.18	U	NA	NA
	Hexachlorobenzene	mg/kg	0.7	NS	NS	0.074	U	NA	NA	0.08	U	0.078	U	NA	NA	NA	0.075	U	NA	NA
	Bis(2-chloroethyl)ether	mg/kg	0.7	NS	NS	0.074	U	NA	NA	0.08	U	0.078	U	NA	NA	NA	0.075	U	NA	NA
	2-Chloronaphthalene	mg/kg	1,000	NS	NS	0.18	U	NA	NA	0.19	U	0.18	U	NA	NA	NA	0.18	U	NA	NA
	1,2-Dichlorobenzene	mg/kg	9	NS	NS	0.18	U	NA	NA	0.19	U	0.18	U	NA	NA	NA	0.18	U	NA	NA
	1,3-Dichlorobenzene	mg/kg	3	NS	NS	0.18	U	NA	NA	0.19	U	0.18	U	NA	NA	NA	0.18	U	NA	NA
	1,4-Dichlorobenzene	mg/kg	0.7	NS	NS	0.074	U	NA	NA	0.08	U	0.078	U	NA	NA	NA	0.075	U	NA	NA
	3,3'-Dichlorobenzidine	mg/kg	3	NS	NS	0.18	U	NA	NA	0.19	U	0.18	U	NA	NA	NA	0.18	U	NA	NA
	2,4-Dinitrotoluene	mg/kg	0.7	NS	NS	0.074	U	NA	NA	0.08	U	0.078	U	NA	NA	NA	0.075	U	NA	NA
	2,6-Dinitrotoluene	mg/kg	100	NS	NS	0.18	U	NA	NA	0.19	U	0.18	U	NA	NA	NA	0.18	U	NA	NA
	Azobenzene	mg/kg	NS	NS	NS	0.18	U	NA	NA	0.19	U	0.18	U	NA	NA	NA	0.18	U	NA	NA
	Fluoranthene	mg/kg	1,000	NS	NS	1.7	NA	NA	NA	29		86		NA	NA	NA	0.11	U	NA	NA
	4-Bromophenyl phenyl ether	mg/kg	100	NS	NS	0.18	U	NA	NA	0.19	U	0.18	U	NA	NA	NA	0.18	U	NA	NA
	Bis(2-chloroisopropyl)ether	mg/kg	0.7	NS	NS	0.074	U	NA	NA	0.08	U	0.078	U	NA	NA	NA	0.075	U	NA	NA
	Bis(2-chloroethoxy)methane	mg/kg	500	NS	NS	0.19	U	NA	NA	0.21	U	0.2	U	NA	NA	NA	0.19	U	NA	NA
	Hexachlorobutadiene	mg/kg	30	NS	NS	0.18	U	NA	NA	0.19	U	0.18	U	NA	NA	NA	0.18	U	NA	NA
	Hexachloroethane	mg/kg	0.7	NS	NS	0.074	U	NA	NA	0.08	U	0.078	U	NA	NA	NA	0.075	U	NA	NA
	Isophorone	mg/kg	100	NS	NS	0.16	U	NA	NA	0.17	U	0.17	U	NA	NA	NA	0.16	U	NA	NA
	Naphthalene	mg/kg	4	NS	NS	0.33	NA	NA	NA	0.3		0.92		NA	NA	NA	0.18	U	NA	NA
	Nitrobenzene	mg/kg	500	NS	NS	0.16	U	NA	NA	0.17	U	0.17	U	NA	NA	NA	0.16	U	NA	NA
	Bis(2-Ethylhexyl)phthalate	mg/kg	90	NS	NS	0.18	U	NA	NA	0.19	U	0.18	U	NA	NA	NA	0.18	U	NA	NA
	Butyl benzyl phthalate	mg/kg	100	NS	NS	0.18	U	NA	NA	0.19	U	0.18	U	NA	NA	NA	0.18	U	NA	NA
	Di-n-butylphthalate	mg/kg	50	NS	NS	0.18	U	NA	NA	0.19	U	0.18	U	NA	NA	NA	0.18	U	NA	NA
	Di-n-octylphthalate	mg/kg	1,000	NS	NS	0.18	U	NA	NA	0.19	U	0.18	U	NA	NA	NA	0.18	U	NA	NA
	Diethyl phthalate	mg/kg	10	NS	NS	0.18	U	NA	NA	0.19	U	0.18	U	NA	NA	NA	0.18	U	NA	NA
	Dimethyl phthalate	mg/kg	0.7	NS	NS	0.074	U	NA	NA	0.08	U	0.078	U	NA	NA	NA	0.075	U	NA	NA
	Benzo(a)anthracene	mg/kg	7	NS	NS	0.64	NA	NA	NA	16		48		NA	NA	NA	0.11	U	NA	NA
	Benzo(a)pyrene	mg/kg	2	NS	NS	0.64	NA	NA	NA	16		44		NA	NA	NA	0.14	U	NA	NA
	Benzo(b)fluoranthene	mg/kg	7	NS	NS	0.72	NA	NA	NA	17		50		NA	NA	NA	0.11	U	NA	NA
	Benzo(k)fluoranthene	mg/kg	70	NS	NS	0.25	NA	NA	NA	4.9		16		NA	NA	NA	0.11	U	NA	NA
	Chrysene	mg/kg	70	NS	NS	0.57	NA	NA	NA	12		37		NA	NA	NA	0.11	U	NA	NA
	Acenaphthylene	mg/kg	1	NS	NS	0.14	U	NA	NA	0.84		2.7		NA	NA	NA	0.14	U	NA	NA
	Anthracene	mg/kg	1,000	NS	NS	0.45	NA	NA	NA	2.2		9.7		NA	NA	NA	0.11	U	NA	NA
	Benzo(ghi)perylene	mg/kg	1,000	NS	NS	0.33	NA	NA	NA	6.1		20		NA	NA	NA	0.14	U	NA	NA
	Fluorene	mg/kg	1,000	NS	NS	0.23	NA	NA	NA	0.19	U	0.61		NA	NA	NA	0.18	U	NA	NA
	Phenanthrene	mg/kg	10	NS	NS	1.9	NA	NA	NA	1.8		6.5		NA	NA	NA	0.11	U	NA	NA
	Dibenzo(a,h)anthracene	mg/kg	0.7	NS	NS	0.074	NA	NA	NA	1.9		5.3		NA	NA	NA	0.075	U	NA	NA
	Indeno(1,2,3-cd)Pyrene	mg/kg	7	NS	NS	0.38	NA	NA	NA	7.7		23		NA	NA	NA	0.14	U	NA	NA
	Pyrene	mg/kg	1,000	NS	NS	1.4	NA	NA	NA	24		73		NA	NA	NA	0.11	U	NA	NA
	Aniline	mg/kg	1,000	NS	NS	0.21	U	NA	NA	0.23	U	0.22	U	NA	NA	NA	0.21	U	NA	NA
	4-Chloroaniline	mg/kg	1	NS	NS	0.18	U	NA	NA	0.19	U	0.18	U	NA	NA	NA	0.18	U	NA	NA
	Dibenzofuran	mg/kg	100	NS	NS	0.24	NA	NA	NA	0.19	U	0.23		NA	NA	NA	0.18	U	NA	NA
	2-Methylnaphthalene	mg/kg	0.7	NS	NS	0.16	NA	NA	NA	0.08	U	0.21		NA	NA	NA	0.075	U	NA	NA
	Acetophenone	mg/kg	1,000	NS	NS	0.18	U	NA	NA	0.19	U	0.18	U	NA	NA	NA	0.18	U	NA	NA
	2,4,6-Trichlorophenol	mg/kg	0.7	NS	NS	0.074	U	NA	NA	0.08	U	0.078	U	NA	NA	NA	0.075	U	NA	NA
	2-Chlorophenol	mg/kg	0.7	NS	NS	0.074	U	NA	NA	0.08	U	0.078	U	NA	NA	NA	0.075	U	NA	NA
	2,4-Dichlorophenol	mg/kg	0.7	NS	NS	0.074	U	NA	NA	0.08	U	0.078	U	NA	NA	NA	0.075	U	NA	NA
	2,4-Dimethylphenol	mg/kg	0.7	NS	NS	0.074	U	NA	NA	0.08	U	0.078	U	NA	NA	NA	0.075	U	NA	NA
	2-Nitrophenol	mg/kg	100	NS	NS	0.38	U	NA	NA	0.41	U	0.4	U	NA	NA	NA	0.39	U	NA	NA
	4-Nitrophenol	mg/kg	100	NS	NS	0.25	U	NA	NA	0.27	U	0.26	U	NA	NA	NA	0.25	U	NA	NA

TABLE 2
Additional Characterization Soil Analytical Results
Green Line Extension Project - Washington Street
Somerville, Massachusetts

Sample Location: Sample Depth^: Sample Date:						GLX-TPW-606A		GLX-TPW-607				GLX-TPW-607A				GLX-TPW-608				GLX-TPW-608A		GLX-TPW-609				GLX-TPW-609A							
						0-5 ft		0-5 ft		0-2/0.6 ft		2-5/4.6 ft		0-5 ft		0-5 ft		0-5 ft		0-2/1 ft		2-5/4 ft		0-5 ft		0-5 ft		0-2/1 ft		2-5/4 ft		0-5 ft	
						02/08/2020		10/20/2019		10/20/2019		10/20/2019		02/08/2020		02/08/2020		11/02/2019		11/02/2019		11/02/2019		02/08/2020		11/02/2019		11/02/2019		11/02/2019		02/08/2020	
Analysis	Analyte	Sample Location:	RCS-1	Unlined Landfill**	Lined Landfill**							Field Dup																					
	2,4-Dinitrophenol	mg/kg	3	NS	NS	0.85	U	NA		NA		NA		0.92	U	0.89	U	NA		NA		NA		0.86	U	NA		NA		0.86	U		
	Pentachlorophenol	mg/kg	3	NS	NS	0.36	U	NA		NA		NA		0.38	U	0.37	U	NA		NA		NA		0.36	U	NA		NA		0.36	U		
	Phenol	mg/kg	1	NS	NS	0.18	U	NA		NA		NA		0.21		0.5		NA		NA		NA		0.18	U	NA		NA		0.18	U		
	2-Methylphenol	mg/kg	500	NS	NS	0.18	U	NA		NA		NA		0.19	U	0.18	U	NA		NA		NA		0.18	U	NA		NA		0.18	U		
	3-Methylphenol/4-Methylphenol	mg/kg	NS	NS	NS	0.26	U	NA		NA		NA		0.28	U	0.33		NA		NA		NA		0.26	U	NA		NA		0.26	U		
	2,4,5-Trichlorophenol	mg/kg	4	NS	NS	0.18	U	NA		NA		NA		0.19	U	0.18	U	NA		NA		NA		0.18	U	NA		NA		0.18	U		
	Pyridine	mg/kg	500	NS	NS	0.19	U	NA		NA		NA		0.21	U	0.2	U	NA		NA		NA		0.19	U	NA		NA		0.19	U		
	Total SVOCs	mg/kg	N/A	100	100	10.2		NA		NA		NA		140		424		NA		NA		NA		ND		NA		NA		NA		ND	
Pesticides																																	
	Delta-BHC	mg/kg	10	NS	NS	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
	Lindane	mg/kg	0.003	NS	NS	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
	Alpha-BHC	mg/kg	50	NS	NS	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
	Beta-BHC	mg/kg	10	NS	NS	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
	Heptachlor	mg/kg	0.3	NS	NS	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
	Aldrin	mg/kg	0.08	NS	NS	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
	Heptachlor epoxide	mg/kg	0.1	NS	NS	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
	Endrin	mg/kg	10	NS	NS	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
	Endrin ketone	mg/kg	10	NS	NS	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
	Dieldrin	mg/kg	0.08	NS	NS	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
	4,4'-DDE	mg/kg	6	NS	NS	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
	4,4'-DDD	mg/kg	8	NS	NS	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
	4,4'-DDT	mg/kg	6	NS	NS	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
	Endosulfan I	mg/kg	0.5	NS	NS	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
	Endosulfan II	mg/kg	0.5	NS	NS	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
	Endosulfan sulfate	mg/kg	0.5	NS	NS	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
	Methoxychlor	mg/kg	200	NS	NS	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
	Chlordane	mg/kg	0.7	NS	NS	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
	Hexachlorobenzene	mg/kg	0.7	NS	NS	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
Herbicides																																	
	MCPP	mg/kg	NS	NS	NS	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
	MCPA	mg/kg	100	NS	NS	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
	Dalapon	mg/kg	1,000	NS	NS	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
	Dicamba	mg/kg	500	NS	NS	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
	Dichloroprop	mg/kg	NS	NS	NS	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
	2,4-D	mg/kg	100	NS	NS	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
	2,4-DB	mg/kg	100	NS	NS	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
	2,4,5-T	mg/kg	100	NS	NS	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
	2,4,5-TP (Silvex)	mg/kg	100	NS	NS	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
PCB Aroclors																																	
	Aroclor-1016	mg/kg	1	NS	NS	NA		0.035	U	NA		NA		NA		NA		0.0362	U	NA		NA		NA		0.0351	U	NA		NA		NA	
	Aroclor-1221	mg/kg	1	NS	NS	NA		0.035	U	NA		NA		NA		NA		0.0362	U	NA		NA		NA		0.0351	U	NA		NA		NA	
	Aroclor-1232	mg/kg	1	NS	NS	NA		0.035	U	NA		NA		NA		NA		0.0362	U	NA		NA		NA		0.0351	U	NA		NA		NA	
	Aroclor-1242	mg/kg	1	NS	NS	NA		0.035	U	NA		NA		NA		NA		0.0362	U	NA		NA		NA		0.0351	U	NA		NA		NA	
	Aroclor-1248	mg/kg	1	NS	NS	NA		0.035	U	NA		NA		NA		NA		0.0362	U	NA		NA		NA		0.0351	U	NA		NA		NA	
	Aroclor-1254	mg/kg	1	NS	NS	NA		0.035	U	NA		NA		NA		NA		0.0362	U	NA		NA		NA		0.0351	U	NA		NA		NA	
	Aroclor-1260	mg/kg	1	NS	NS	NA		0.035	U	NA		NA		NA		NA		0.0362	U	NA		NA		NA		0.0351	U	NA		NA		NA	
	Aroclor-1262	mg/kg	1	NS	NS	NA		0.035	U	NA		NA		NA		NA		0.0362	U	NA		NA		NA		0.0351	U	NA		NA		NA	
	Aroclor-1268	mg/kg	1	NS	NS	NA		0.035	U	NA		NA		NA		NA		0.0362	U	NA		NA		NA		0.0351	U	NA		NA		NA	
	PCBs, Total	mg/kg	1	2	2	NA		0.035	U	NA		NA		NA		NA		0.0362	U	NA		NA		NA		0.0351	U	NA		NA		NA	
TPH																																	
	Total Petroleum Hydrocarbons C10-C36	mg/kg	1,000	2,500	5,000	52.7		NA		NA		NA		341		548		NA		NA		NA		34.7	U	NA		NA		NA		35.9	U
Metals, total																																	
	Antimony	mg/kg	20	NS	NS	NA		2.09	U	NA		NA		NA		NA		2.18	U	NA		NA		NA		2.08	U	NA		NA		NA	
	Arsenic	mg/kg	20	40	40	NA		8.05		NA		NA		NA		NA		4.94		NA		NA		NA		5.05		NA		NA		NA	
	Barium	mg/kg	1,000	NS	NS	NA		23.7		NA		NA		NA		NA		17.0		NA		NA		NA		23.3		NA		NA		NA	
	Beryllium	mg/kg	90	NS	NS	NA		0.209	U	NA		NA		NA		NA		0.218	U	NA		NA		NA		0.208	U	NA		NA			

TABLE 2
Additional Characterization Soil Analytical Results
Green Line Extension Project - Washington Street
Somerville, Massachusetts

Sample Location: Sample Depth^: Sample Date:						GLX-TPW-606A	GLX-TPW-607			GLX-TPW-607A		GLX-TPW-608			GLX-TPW-608A	GLX-TPW-609			GLX-TPW-609A
						0-5 ft	0-5 ft	0-2/0.6 ft	2-5/4.6 ft	0-5 ft	0-5 ft	0-5 ft	0-2/1 ft	2-5/4 ft	0-5 ft	0-5 ft	0-2/1 ft	2-5/4 ft	0-5 ft
						02/08/2020	10/20/2019	10/20/2019	10/20/2019	02/08/2020	02/08/2020	11/02/2019	11/02/2019	11/02/2019	02/08/2020	11/02/2019	11/02/2019	11/02/2019	02/08/2020
Analysis	Analyte	Sample Location:	RCS-1	Unlined Landfill**	Lined Landfill**						Field Dup								
	Vanadium	mg/kg	400	NS	NS	NA	21.9	NA	NA	NA	NA	12.4	NA	NA	NA	20.3	NA	NA	NA
	Zinc	mg/kg	1,000	NS	NS	NA	99.7	NA	NA	NA	NA	26.9	NA	NA	NA	40.6	NA	NA	NA

TABLE 2
Additional Characterization Soil Ananalytical Results
Green Line Extension Project - Washington Street
Somerville, Massachusetts

Sample Location: Sample Depth^:						GLX-TPW-606A	GLX-TPW-607				GLX-TPW-607A				GLX-TPW-608						GLX-TPW-608A	GLX-TPW-609						GLX-TPW-609A
Sample Date:						0-5 ft	0-5 ft	0-2/0.6 ft	2-5/4.6 ft	0-5 ft	0-5 ft	0-5 ft	0-2/1 ft	2-5/4 ft	0-5 ft	0-5 ft	0-2/1 ft	2-5/4 ft	0-5 ft	0-5 ft	0-2/1 ft	2-5/4 ft	0-5 ft					
Sample Date:						02/08/2020	10/20/2019	10/20/2019	10/20/2019	02/08/2020	02/08/2020	11/02/2019	11/02/2019	11/02/2019	02/08/2020	11/02/2019	11/02/2019	11/02/2019	02/08/2020	11/02/2019	11/02/2019	11/02/2019	02/08/2020					
Analysis	Analyte	Sample Location:	RCS-1	Unlined Landfill**	Lined Landfill**	Field Dup																						
Metals, TCLP																												
	Lead	mg/L	5*	NS	NS	NA		NA		NA		NA		NA		NA		NA		NA		NA						
General Chemistry																												
	Ignitability	none	NS	NS	NS	NI		NA		NA		NI		NA		NA		NI		NA		NA						
	Specific conductance	umhos/cm	NS	4,000	8,000	10		NA		NA		12		13		NA		NA		10	U	NA						
	pH	su	NS	>2 <12.5	>2 <12.5	7.6		NA		7.8		6.8		7.2		NA		7.0		6.3		7.5						
	Reactive Cyanide	mg/kg	NS	< 250	< 250	10	U	NA		NA		10	U	10	U	NA		NA		10	U	NA						
	Reactive Sulfide	mg/kg	NS	< 500	< 500	10	U	NA		NA		10	U	10	U	NA		NA		10	U	NA						

Notes:

mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).

mg/L - milligrams per liter.

su - Standard unit.

umhos/cm - Micro-mhos per centimeter.

E - Value exceeds calibration range.

I - The lower value for the two columns has been reported due to obvious interference.

NA - Sample not analyzed for the listed analyte.

N/A - Not available/applicable.

ND - Not detected.

NI - Not ignitable.

NS - No MassDEP standards exist for this analyte.

P - The RPD (relative percent difference) between the results for the two columns exceeds the method-specified criteria.

U - Analyte was not detected at specified quantitation limit.

Values in **bold** indicate the analyte was detected.

Values shown in bold and shaded type are equal to RCS-1 or exceed one or more of the listed MassDEP standards/criteria.

VOCs - Volatile Organic Compounds.

SVOCs - Semivolatile Organic Compounds.

PCBs - Polychlorinated Biphenyls.

TPH - Total Petroleum Hydrocarbons.

TCLP - Toxicity Characteristic Leaching Procedure.

RC - Reportable concentration.

* - EPA SW-846 Chapter 7, Table 7-1, Maximum Concentration of Contaminants for Toxicity Characteristic.

** - Reuse and Disposal of Contaminated Soil at Massachusetts Landfills, MassDEP Policy # COMM-97-001, August 1997.

^ - Sample depth for other/VOCs analysis; otherwise for all the analyses.

TABLE 2
Additional Characterization Soil Analytical Results
Green Line Extension Project - Washington Street
Somerville, Massachusetts

Sample Location: Sample Depth: Sample Date:						GLX-TPW-610								GLX-TPW-610A		GLX-TPW-611						GLX-TPW-611A		GLX-TPW-612						GLX-TPW-612A		GLX-TPW-613					
						0-8 ft		0-2/1 ft		2-5/3 ft		5-8/7 ft		0-5 ft		0-5 ft		0-2/1.5 ft		2-5/4 ft		0-5 ft		0-5 ft		0-2/1.5 ft		2-5/4 ft		0-5 ft		0-5 ft		0-2/1.5 ft		2-5/4 ft	
						11/02/2019		11/02/2019		11/02/2019		11/02/2019		02/08/2020		10/20/2019		10/20/2019		10/20/2019		02/08/2020		10/20/2019		10/20/2019		10/20/2019		02/08/2020		10/20/2019		10/20/2019		10/20/2019	
Analysis	Analyte	Sample Location:	RCS-1	Unlined Landfill**	Lined Landfill**																																
VOCs																																					
	Methylene chloride	mg/kg	0.1	NS	NS	NA		0.0038	U	0.0024	U	0.0030	U	NA		NA		0.0049	U	0.0037	U	NA		NA		0.0042	U	0.0038	U	NA		NA		0.0034	U	0.0049	U
	1,1-Dichloroethane	mg/kg	0.4	NS	NS	NA		0.00076	U	0.00048	U	0.00061	U	NA		NA		0.00098	U	0.00074	U	NA		NA		0.00084	U	0.00076	U	NA		NA		0.00068	U	0.00098	U
	Chloroform	mg/kg	0.2	NS	NS	NA		0.0011	U	0.00071	U	0.00091	U	NA		NA		0.0015	U	0.0011	U	NA		NA		0.0013	U	0.0011	U	NA		NA		0.0010	U	0.0015	U
	Carbon tetrachloride	mg/kg	5	NS	NS	NA		0.00076	U	0.00048	U	0.00061	U	NA		NA		0.00098	U	0.00074	U	NA		NA		0.00084	U	0.00076	U	NA		NA		0.00068	U	0.00098	U
	1,2-Dichloropropane	mg/kg	0.1	NS	NS	NA		0.00076	U	0.00048	U	0.00061	U	NA		NA		0.00098	U	0.00074	U	NA		NA		0.00084	U	0.00076	U	NA		NA		0.00068	U	0.00098	U
	Dibromochloromethane	mg/kg	0.005	NS	NS	NA		0.00076	U	0.00048	U	0.00061	U	NA		NA		0.00098	U	0.00074	U	NA		NA		0.00084	U	0.00076	U	NA		NA		0.00068	U	0.00098	U
	1,1,2-Trichloroethane	mg/kg	0.1	NS	NS	NA		0.00076	U	0.00048	U	0.00061	U	NA		NA		0.00098	U	0.00074	U	NA		NA		0.00084	U	0.00076	U	NA		NA		0.00068	U	0.00098	U
	Tetrachloroethene	mg/kg	1	NS	NS	NA		0.00038	U	0.00024	U	0.00030	U	NA		NA		0.00049	U	0.00037	U	NA		NA		0.00042	U	0.00038	U	NA		NA		0.00034	U	0.00049	U
	Chlorobenzene	mg/kg	1	NS	NS	NA		0.00038	U	0.00024	U	0.00030	U	NA		NA		0.00049	U	0.00037	U	NA		NA		0.00042	U	0.00038	U	NA		NA		0.00034	U	0.00049	U
	Trichlorofluoromethane	mg/kg	1,000	NS	NS	NA		0.003	U	0.0019	U	0.0024	U	NA		NA		0.0039	U	0.0030	U	NA		NA		0.0034	U	0.0030	U	NA		NA		0.0027	U	0.0039	U
	1,2-Dichloroethane	mg/kg	0.1	NS	NS	NA		0.00076	U	0.00048	U	0.00061	U	NA		NA		0.00098	U	0.00074	U	NA		NA		0.00084	U	0.00076	U	NA		NA		0.00068	U	0.00098	U
	1,1,1-Trichloroethane	mg/kg	30	NS	NS	NA		0.00038	U	0.00024	U	0.00030	U	NA		NA		0.00049	U	0.00037	U	NA		NA		0.00042	U	0.00038	U	NA		NA		0.00034	U	0.00049	U
	Bromodichloromethane	mg/kg	0.1	NS	NS	NA		0.00038	U	0.00024	U	0.00030	U	NA		NA		0.00049	U	0.00037	U	NA		NA		0.00042	U	0.00038	U	NA		NA		0.00034	U	0.00049	U
	trans-1,3-Dichloropropene	mg/kg	0.01	NS	NS	NA		0.00076	U	0.00048	U	0.00061	U	NA		NA		0.00098	U	0.00074	U	NA		NA		0.00084	U	0.00076	U	NA		NA		0.00068	U	0.00098	U
	cis-1,3-Dichloropropene	mg/kg	0.01	NS	NS	NA		0.00038	U	0.00024	U	0.00030	U	NA		NA		0.00049	U	0.00037	U	NA		NA		0.00042	U	0.00038	U	NA		NA		0.00034	U	0.00049	U
	1,3-Dichloropropene, Total	mg/kg	0.01	NS	NS	NA		0.00038	U	0.00024	U	0.00030	U	NA		NA		0.00049	U	0.00037	U	NA		NA		0.00042	U	0.00038	U	NA		NA		0.00034	U	0.00049	U
	1,1-Dichloropropene	mg/kg	0.01	NS	NS	NA		0.00038	U	0.00024	U	0.00030	U	NA		NA		0.00049	U	0.00037	U	NA		NA		0.00042	U	0.00038	U	NA		NA		0.00034	U	0.00049	U
	Bromoform	mg/kg	0.1	NS	NS	NA		0.003	U	0.0019	U	0.0024	U	NA		NA		0.0039	U	0.0030	U	NA		NA		0.0034	U	0.0030	U	NA		NA		0.0027	U	0.0039	U
	1,1,2,2-Tetrachloroethane	mg/kg	0.005	NS	NS	NA		0.00038	U	0.00024	U	0.00030	U	NA		NA		0.00049	U	0.00037	U	NA		NA		0.00042	U	0.00038	U	NA		NA		0.00034	U	0.00049	U
	Benzene	mg/kg	2	NS	NS	NA		0.00038	U	0.00024	U	0.00030	U	NA		NA		0.00049	U	0.00037	U	NA		NA		0.00042	U	0.00038	U	NA		NA		0.00034	U	0.00049	U
	Toluene	mg/kg	30	NS	NS	NA		0.00076	U	0.00048	U	0.00061	U	NA		NA		0.00098	U	0.00074	U	NA		NA		0.00084	U	0.00076	U	NA		NA		0.00068	U	0.00098	U
	Ethylbenzene	mg/kg	40	NS	NS	NA		0.00076	U	0.00048	U	0.00061	U	NA		NA		0.00098	U	0.00074	U	NA		NA		0.00084	U	0.00076	U	NA		NA		0.00068	U	0.00098	U
	Chloromethane	mg/kg	100	NS	NS	NA		0.003	U	0.0019	U	0.0024	U	NA		NA		0.0039	U	0.0030	U	NA		NA		0.0034	U	0.0030	U	NA		NA		0.0027	U	0.0039	U
	Bromomethane	mg/kg	0.5	NS	NS	NA		0.0015	U	0.00095	U	0.0012	U	NA		NA		0.0020	U	0.0015	U	NA		NA		0.0017	U	0.0015	U	NA		NA		0.0014	U	0.0020	U
	Vinyl chloride	mg/kg	0.7	NS	NS	NA		0.00076	U	0.00048	U	0.00061	U	NA		NA		0.00098	U	0.00074	U	NA		NA		0.00084	U	0.00076	U	NA		NA		0.00068	U	0.00098	U
	Chloroethane	mg/kg	100	NS	NS	NA		0.0015	U	0.00095	U	0.0012	U	NA		NA		0.0020	U	0.0015	U	NA		NA		0.0017	U	0.0015	U	NA		NA		0.0014	U	0.0020	U
	1,1-Dichloroethene	mg/kg	3	NS	NS	NA		0.00076	U	0.00048	U	0.0006																									

TABLE 2
Additional Characterization Soil Analytical Results
Green Line Extension Project - Washington Street
Somerville, Massachusetts

Sample Location: Sample Depth: Sample Date:						GLX-TPW-610				GLX-TPW-610A	GLX-TPW-611				GLX-TPW-611A	GLX-TPW-612				GLX-TPW-612A	GLX-TPW-613																
						0-8 ft	0-2/1 ft		2-5/3 ft	5-8/7 ft	0-5 ft	0-5 ft		0-2/1.5 ft	2-5/4 ft	0-5 ft	0-5 ft		0-2/1.5 ft	2-5/4 ft	0-5 ft	0-5 ft		0-2/1.5 ft	2-5/4 ft												
						11/02/2019	11/02/2019		11/02/2019	11/02/2019	02/08/2020	10/20/2019		10/20/2019	10/20/2019	02/08/2020	10/20/2019		10/20/2019	10/20/2019	02/08/2020	10/20/2019		10/20/2019	10/20/2019												
Analysis	Analyte	Sample Location:	RCS-1	Unlined Landfill**	Lined Landfill**																																
	Naphthalene	mg/kg	4	NS	NS	NA		0.003	U	0.0019	U	0.0024	U	NA		NA		0.0039	U	0.0030	U	NA		NA		0.0034	U	0.0030	U	NA		NA		0.0027	U	0.0039	U
	n-Propylbenzene	mg/kg	100	NS	NS	NA		0.00076	U	0.00048	U	0.00061	U	NA		NA		0.00098	U	0.00074	U	NA		NA		0.00084	U	0.00076	U	NA		NA		0.00068	U	0.00098	U
	1,2,3-Trichlorobenzene	mg/kg	NS	NS	NS	NA		0.0015	U	0.00095	U	0.0012	U	NA		NA		0.0020	U	0.0015	U	NA		NA		0.0017	U	0.0015	U	NA		NA		0.0014	U	0.0020	U
	1,2,4-Trichlorobenzene	mg/kg	2	NS	NS	NA		0.0015	U	0.00095	U	0.0012	U	NA		NA		0.0020	U	0.0015	U	NA		NA		0.0017	U	0.0015	U	NA		NA		0.0014	U	0.0020	U
	1,3,5-Trimethylbenzene	mg/kg	10	NS	NS	NA		0.0015	U	0.00095	U	0.0012	U	NA		NA		0.0020	U	0.0015	U	NA		NA		0.0017	U	0.0015	U	NA		NA		0.0014	U	0.0020	U
	1,2,4-Trimethylbenzene	mg/kg	1,000	NS	NS	NA		0.0015	U	0.00095	U	0.0012	U	NA		NA		0.0020	U	0.0015	U	NA		NA		0.0017	U	0.0015	U	NA		NA		0.0014	U	0.0020	U
	Ethyl ether	mg/kg	100	NS	NS	NA		0.0015	U	0.00095	U	0.0012	U	NA		NA		0.0020	U	0.0015	U	NA		NA		0.0017	U	0.0015	U	NA		NA		0.0014	U	0.0020	U
	Isopropyl Ether	mg/kg	100	NS	NS	NA		0.0015	U	0.00095	U	0.0012	U	NA		NA		0.0020	U	0.0015	U	NA		NA		0.0017	U	0.0015	U	NA		NA		0.0014	U	0.0020	U
	Ethyl-Tert-Butyl-Ether	mg/kg	NS	NS	NS	NA		0.0015	U	0.00095	U	0.0012	U	NA		NA		0.0020	U	0.0015	U	NA		NA		0.0017	U	0.0015	U	NA		NA		0.0014	U	0.0020	U
	Tertiary-Amyl Methyl Ether	mg/kg	NS	NS	NS	NA		0.0015	U	0.00095	U	0.0012	U	NA		NA		0.0020	U	0.0015	U	NA		NA		0.0017	U	0.0015	U	NA		NA		0.0014	U	0.0020	U
	1,4-Dioxane	mg/kg	0.2	NS	NS	NA		0.061	U	0.038	U	0.049	U	NA		NA		0.078	U	0.06	U	NA		NA		0.067	U	0.06	U	NA		NA		0.054	U	0.078	U
	Total VOCs	mg/kg	N/A	4	10	NA		0.198		0.018		0.035		NA		NA		0.095		0.028		NA		NA		0.080		0.059		NA		NA		0.028		0.032	
SVOCs																																					
	Acenaphthene	mg/kg	4	NS	NS	NA		NA		NA		NA		0.14	U	NA		NA		NA		NA		NA		0.14	U	NA		NA		NA		NA		NA	
	1,2,4-Trichlorobenzene	mg/kg	2	NS	NS	NA		NA		NA		NA		0.17	U	NA		NA		NA		NA		NA		0.18	U	NA		NA		NA		NA		NA	
	Hexachlorobenzene	mg/kg	0.7	NS	NS	NA		NA		NA		NA		0.073	U	NA		NA		NA		NA		NA		0.074	U	NA		NA		NA		NA		NA	
	Bis(2-chloroethyl)ether	mg/kg	0.7	NS	NS	NA		NA		NA		NA		0.073	U	NA		NA		NA		NA		NA		0.074	U	NA		NA		NA		NA		NA	
	2-Chloronaphthalene	mg/kg	1,000	NS	NS	NA		NA		NA		NA		0.17	U	NA		NA		NA		NA		NA		0.18	U	NA		NA		NA		NA		NA	
	1,2-Dichlorobenzene	mg/kg	9	NS	NS	NA		NA		NA		NA		0.17	U	NA		NA		NA		NA		NA		0.18	U	NA		NA		NA		NA		NA	
	1,3-Dichlorobenzene	mg/kg	3	NS	NS	NA		NA		NA		NA		0.17	U	NA		NA		NA		NA		NA		0.18	U	NA		NA		NA		NA		NA	
	1,4-Dichlorobenzene	mg/kg	0.7	NS	NS	NA		NA		NA		NA		0.073	U	NA		NA		NA		NA		NA		0.074	U	NA		NA		NA		NA		NA	
	3,3'-Dichlorobenzidine	mg/kg	3	NS	NS	NA		NA		NA		NA		0.17	U	NA		NA		NA		NA		NA		0.18	U	NA		NA		NA		NA		NA	
	2,4-Dinitrotoluene	mg/kg	0.7	NS	NS	NA		NA		NA		NA		0.073	U	NA		NA		NA		NA		NA		0.074	U	NA		NA		NA		NA		NA	
	2,6-Dinitrotoluene	mg/kg	100	NS	NS	NA		NA		NA		NA		0.17	U	NA		NA		NA		NA		NA		0.18	U	NA		NA		NA		NA		NA	
	Azobenzene	mg/kg	NS	NS	NS	NA		NA		NA		NA		0.17	U	NA		NA		NA		NA		NA		0.18	U	NA		NA		NA		NA		NA	
	Fluoranthene	mg/kg	1,000	NS	NS	NA		NA		NA		NA		0.1	U	NA		NA		NA		0.14		NA		NA		NA		NA		NA		NA		NA	
	4-Bromophenyl phenyl ether	mg/kg	100	NS	NS	NA		NA		NA		NA		0.17	U	NA		NA		NA		0.18	U	NA		NA		NA		NA		NA		NA		NA	
	Bis(2-chloroisopropyl)ether	mg/kg	0.7	NS	NS	NA		NA		NA		NA		0.073	U	NA		NA		NA		0.074	U	NA		NA		NA		NA		NA		NA		NA	
	Bis(2-chloroethoxy)methane	mg/kg	500	NS	NS	NA		NA		NA		NA		0.19	U	NA		NA		NA		0.19	U	NA		NA		NA		NA		NA		NA		NA	
	Hexachlorobutadiene	mg/kg	30	NS	NS	NA		NA		NA		NA		0.17	U	NA		NA		NA		0.18	U	NA		NA		NA		NA		NA		NA		NA	
	Hexachloroethane	mg/kg	0.7	NS	NS	NA		NA		NA		NA		0.073	U																						

TABLE 2
Additional Characterization Soil Analytical Results
Green Line Extension Project - Washington Street
Somerville, Massachusetts

Sample Location: Sample Depth^: Sample Date:						GLX-TPW-610				GLX-TPW-610A	GLX-TPW-611			GLX-TPW-611A	GLX-TPW-612			GLX-TPW-612A	GLX-TPW-613		
						0-8 ft	0-2/1 ft	2-5/3 ft	5-8/7 ft	0-5 ft	0-5 ft	0-2/1.5 ft	2-5/4 ft	0-5 ft	0-5 ft	0-2/1.5 ft	2-5/4 ft	0-5 ft	0-5 ft	0-2/1.5 ft	2-5/4 ft
						11/02/2019	11/02/2019	11/02/2019	11/02/2019	02/08/2020	10/20/2019	10/20/2019	10/20/2019	02/08/2020	10/20/2019	10/20/2019	10/20/2019	02/08/2020	10/20/2019	10/20/2019	10/20/2019
Analysis	Analyte	Sample Location:	RCS-1	Unlined Landfill**	Lined Landfill**																
	2,4-Dinitrophenol	mg/kg	3	NS	NS	NA	NA	NA	NA	0.84 U	NA	NA	NA	0.85 U	NA	NA	NA	0.85 U	NA	NA	NA
	Pentachlorophenol	mg/kg	3	NS	NS	NA	NA	NA	NA	0.35 U	NA	NA	NA	0.35 U	NA	NA	NA	0.36 U	NA	NA	NA
	Phenol	mg/kg	1	NS	NS	NA	NA	NA	NA	0.17 U	NA	NA	NA	0.18 U	NA	NA	NA	0.18 U	NA	NA	NA
	2-Methylphenol	mg/kg	500	NS	NS	NA	NA	NA	NA	0.17 U	NA	NA	NA	0.18 U	NA	NA	NA	0.18 U	NA	NA	NA
	3-Methylphenol/4-Methylphenol	mg/kg	NS	NS	NS	NA	NA	NA	NA	0.25 U	NA	NA	NA	0.26 U	NA	NA	NA	0.26 U	NA	NA	NA
	2,4,5-Trichlorophenol	mg/kg	4	NS	NS	NA	NA	NA	NA	0.17 U	NA	NA	NA	0.18 U	NA	NA	NA	0.18 U	NA	NA	NA
	Pyridine	mg/kg	500	NS	NS	NA	NA	NA	NA	0.19 U	NA	NA	NA	0.19 U	NA	NA	NA	0.19 U	NA	NA	NA
	Total SVOCs	mg/kg	N/A	100	100	NA	NA	NA	NA	ND	NA	NA	NA	0.250	NA	NA	NA	ND	NA	NA	NA
Pesticides																					
	Delta-BHC	mg/kg	10	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lindane	mg/kg	0.003	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alpha-BHC	mg/kg	50	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Beta-BHC	mg/kg	10	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Heptachlor	mg/kg	0.3	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Aldrin	mg/kg	0.08	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Heptachlor epoxide	mg/kg	0.1	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Endrin	mg/kg	10	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Endrin ketone	mg/kg	10	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dieldrin	mg/kg	0.08	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4,4'-DDE	mg/kg	6	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4,4'-DDD	mg/kg	8	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4,4'-DDT	mg/kg	6	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Endosulfan I	mg/kg	0.5	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Endosulfan II	mg/kg	0.5	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Endosulfan sulfate	mg/kg	0.5	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Methoxychlor	mg/kg	200	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chlordane	mg/kg	0.7	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachlorobenzene	mg/kg	0.7	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Herbicides																					
	MCPP	mg/kg	NS	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MCPA	mg/kg	100	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dalapon	mg/kg	1,000	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dicamba	mg/kg	500	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dichloroprop	mg/kg	NS	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-D	mg/kg	100	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-DB	mg/kg	100	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4,5-T	mg/kg	100	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4,5-TP (Silvex)	mg/kg	100	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCB Aroclors																					
	Aroclor-1016	mg/kg	1	NS	NS	0.0350	NA	NA	NA	NA	NA	0.036	NA	NA	0.035	NA	NA	NA	NA	0.037	NA
	Aroclor-1221	mg/kg	1	NS	NS	0.0350	NA	NA	NA	NA	NA	0.036	NA	NA	0.035	NA	NA	NA	NA	0.037	NA
	Aroclor-1232	mg/kg	1	NS	NS	0.0350	NA	NA	NA	NA	NA	0.036	NA	NA	0.035	NA	NA	NA	NA	0.037	NA
	Aroclor-1242	mg/kg	1	NS	NS	0.0350	NA	NA	NA	NA	NA	0.036	NA	NA	0.035	NA	NA	NA	NA	0.037	NA
	Aroclor-1248	mg/kg	1	NS	NS	0.0350	NA	NA	NA	NA	NA	0.036	NA	NA	0.035	NA	NA	NA	NA	0.037	NA
	Aroclor-1254	mg/kg	1	NS	NS	0.0350	NA	NA	NA	NA	NA	0.036	NA	NA	0.035	NA	NA	NA	NA	0.037	NA
	Aroclor-1260	mg/kg	1	NS	NS	0.0350	NA	NA	NA	NA	NA	0.036	NA	NA	0.035	NA	NA	NA	NA	0.037	NA
	Aroclor-1262	mg/kg	1	NS	NS	0.0350	NA	NA	NA	NA	NA	0.036	NA	NA	0.035	NA	NA	NA	NA	0.037	NA
	Aroclor-1268	mg/kg	1	NS	NS	0.0350	NA	NA	NA	NA	NA	0.036	NA	NA	0.035	NA	NA	NA	NA	0.037	NA
	PCBs, Total	mg/kg	1	2	2	0.0350	NA	NA	NA	NA	NA	0.036	NA	NA	0.035	NA	NA	NA	NA	0.037	NA
TPH																					
	Total Petroleum Hydrocarbons C10-C36	mg/kg	1,000	2,500	5,000	NA	NA	NA	NA	34.1	NA	NA	NA	35.1	NA	NA	NA	35.3	NA	NA	NA
Metals, total																					
	Antimony	mg/kg	20	NS	NS	2.12	NA	NA	NA	NA	NA	2.17	NA	NA	2.07	NA	NA	NA	NA	2.15	NA
	Arsenic	mg/kg	20	40	40	3.85	NA	NA	NA	NA	NA	3.56	NA	NA	2.90	NA	NA	NA	NA	2.18	NA
	Barium	mg/kg	1,000	NS	NS	20.4	NA	NA	NA	NA	NA	29.6	NA	NA	14.8	NA	NA	NA	NA	25.6	NA
	Beryllium	mg/kg	90	NS	NS	0.212	NA	NA	NA	NA	NA	0.217	NA	NA	0.207	NA	NA	NA	NA	0.215	NA
	Cadmium	mg/kg	70	30	80	0.425	NA	NA	NA	NA	NA	0.433	NA	NA	0.414	NA	NA	NA	NA	0.431	NA
	Chromium	mg/kg	100	1,000	1,000	12.7	NA	NA	NA	NA	NA	11.3	NA	NA	16.6	NA	NA	NA	NA	13.8	NA
	Lead	mg/kg	200	1,000	2,000	17.9	NA	NA	NA	NA	NA	58.6	NA	NA	8.80	NA	NA	NA	NA	9.52	NA
	Mercury	mg/kg	20	10	10	NA	NA	NA	NA	0.078	NA	NA	NA	0.078	NA	NA	NA	0.079	NA	NA	NA
	Nickel	mg/kg	600	NS	NS	7.43	NA	NA	NA	NA	NA	9.82	NA	NA	9.84	NA	NA	NA	NA	10.0	NA
	Selenium	mg/kg	400	NS	NS	2.12	NA	NA	NA	NA	NA	2.17	NA	NA	2.07	NA	NA	NA	NA	2.15	NA
	Silver	mg/kg	100	NS	NS	0.425	NA	NA	NA	NA	NA	0.433	NA	NA	0.414	NA	NA	NA	NA	0.431	NA
	Thallium	mg/kg	8	NS	NS	2.12	NA	NA	NA	NA	NA	2.17	NA	NA	2.07	NA	NA	NA	NA	2.15	NA

TABLE 2
Additional Characterization Soil Analytical Results
Green Line Extension Project - Washington Street
Somerville, Massachusetts

Sample Location: Sample Depth: Sample Date:						GLX-TPW-610				GLX-TPW-610A	GLX-TPW-611			GLX-TPW-611A	GLX-TPW-612			GLX-TPW-612A	GLX-TPW-613		
						0-8 ft	0-2/1 ft	2-5/3 ft	5-8/7 ft	0-5 ft	0-5 ft	0-2/1.5 ft	2-5/4 ft	0-5 ft	0-5 ft	0-2/1.5 ft	2-5/4 ft	0-5 ft	0-5 ft	0-2/1.5 ft	2-5/4 ft
						11/02/2019	11/02/2019	11/02/2019	11/02/2019	02/08/2020	10/20/2019	10/20/2019	10/20/2019	02/08/2020	10/20/2019	10/20/2019	10/20/2019	02/08/2020	10/20/2019	10/20/2019	10/20/2019
Analysis	Analyte	Sample Location:	RCS-1	Unlined Landfill**	Lined Landfill**																
	Vanadium	mg/kg	400	NS	NS	20.5	NA	NA	NA	NA	NA	23.6	NA	NA	21.1	NA	NA	NA	NA	20.5	NA
	Zinc	mg/kg	1,000	NS	NS	35.6	NA	NA	NA	NA	NA	51.7	NA	NA	36.1	NA	NA	NA	NA	45.8	NA

TABLE 2
Additional Characterization Soil Ananalytical Results
Green Line Extension Project - Washington Street
Somerville, Massachusetts

Sample Location: Sample Depth: Sample Date:						GLX-TPW-610								GLX-TPW-610A		GLX-TPW-611						GLX-TPW-611A		GLX-TPW-612						GLX-TPW-612A		GLX-TPW-613					
						0-8 ft		0-2/1 ft		2-5/3 ft		5-8/7 ft		0-5 ft		0-5 ft		0-2/1.5 ft		2-5/4 ft		0-5 ft		0-5 ft		0-2/1.5 ft		2-5/4 ft		0-5 ft		0-5 ft		0-2/1.5 ft		2-5/4 ft	
						11/02/2019		11/02/2019		11/02/2019		11/02/2019		02/08/2020		10/20/2019		10/20/2019		10/20/2019		02/08/2020		10/20/2019		10/20/2019		10/20/2019		02/08/2020		10/20/2019		10/20/2019		10/20/2019	
Analysis	Analyte	Sample Location:	RCS-1	Unlined Landfill**	Lined Landfill**																																
Metals, TCLP																																					
	Lead	mg/L	5*	NS	NS	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA			
General Chemistry																																					
	Ignitability	none	NS	NS	NS	NA		NA		NA		NI		NA		NA		NA		NI		NA		NA		NA		NI		NA		NA		NA			
	Specific conductance	umhos/cm	NS	4,000	8,000	NA		NA		NA		10	U	NA		NA		NA		10	U	NA		NA		10	U	NA		NA		NA		NA			
	pH	su	NS	>2 <12.5	>2 <12.5	NA		7.2		7.5		7.3		NA		7.0		6.5		6.5		NA		4.0		6.6		7.3		NA		7.1		6.1			
	Reactive Cyanide	mg/kg	NS	< 250	< 250	NA		NA		NA		10	U	NA		NA		NA		10	U	NA		NA		NA		10	U	NA		NA		NA			
	Reactive Sulfide	mg/kg	NS	< 500	< 500	NA		NA		NA		10	U	NA		NA		NA		10	U	NA		NA		NA		10	U	NA		NA		NA			

Notes:

mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).

mg/L - milligrams per liter.

su - Standard unit.

umhos/cm - Micro-mhos per centimeter.

E - Value exceeds calibration range.

I - The lower value for the two columns has been reported due to obvious interference.

NA - Sample not analyzed for the listed analyte.

N/A - Not available/applicable.

ND - Not detected.

NI - Not ignitable.

NS - No MassDEP standards exist for this analyte.

P - The RPD (relative percent difference) between the results for the two columns exceeds the method-specified criteria.

U - Analyte was not detected at specified quantitation limit.

Values in **bold** indicate the analyte was detected.

Values shown in bold and shaded type are equal to RCS-1 or exceed one or more of the listed MassDEP standards/criteria.

VOCs - Volatile Organic Compounds.

SVOCs - Semivolatile Organic Compounds.

PCBs - Polychlorinated Biphenyls.

TPH - Total Petroleum Hydrocarbons.

TCLP - Toxicity Characteristic Leaching Procedure.

RC - Reportable concentration.

* - EPA SW-846 Chapter 7, Table 7-1, Maximum Concentration of Contaminants for Toxicity Characteristic.

** - Reuse and Disposal of Contaminated Soil at Massachusetts Landfills, MassDEP Policy # COMM-97-001, August 1997.

^ - Sample depth for other/VOCs analysis; otherwise for all the analyses.

TABLE 2
Additional Characterization Soil Analytical Results
Green Line Extension Project - Washington Street
Somerville, Massachusetts

Sample Location: Sample Depth: Sample Date:						GLX-TPW-613A		GLX-TPW-614					GLX-TPW-614A		GLX-TPW-615						WASH-C15DS		WASH-NABUTDS														
						0-5 ft	0-2/1 ft		2-5/4 ft		4 ft		0-5 ft	0-15 ft	1 ft	2-5/4 ft		5-8/7 ft	8-12/10 ft	12-15/13 ft	N/A	5 ft	N/A	3 ft													
						02/08/2020	10/20/2019	10/20/2019	10/20/2019	10/20/2019	02/08/2020	10/20/2019	10/20/2019	10/20/2019	10/20/2019	10/20/2019	10/20/2019	10/20/2019	10/20/2019	03/19/2020	03/19/2020	03/20/2020	03/20/2020														
Analysis	Analyte	Sample Location:	RCS-1	Unlined Landfill**	Lined Landfill**							Field Dup																									
VOCs																																					
	Methylene chloride	mg/kg	0.1	NS	NS	NA		NA		0.0043	U	0.0035	U	0.0039	U	NA		NA		0.0041	U	0.0033	U	0.0036	U	0.0037	U	0.0034	U	NA		0.0038	U	NA		0.0041	U
	1,1-Dichloroethane	mg/kg	0.4	NS	NS	NA		NA		0.00085	U	0.00070	U	0.00078	U	NA		NA		0.00082	U	0.00066	U	0.00071	U	0.00075	U	0.00067	U	NA		0.00077	U	NA		0.00082	U
	Chloroform	mg/kg	0.2	NS	NS	NA		NA		0.0013	U	0.0010	U	0.0012	U	NA		NA		0.0012	U	0.00099	U	0.0011	U	0.0011	U	0.0010	U	NA		0.0012	U	NA		0.0012	U
	Carbon tetrachloride	mg/kg	5	NS	NS	NA		NA		0.00085	U	0.00070	U	0.00078	U	NA		NA		0.00082	U	0.00066	U	0.00071	U	0.00075	U	0.00067	U	NA		0.00077	U	NA		0.00082	U
	1,2-Dichloropropane	mg/kg	0.1	NS	NS	NA		NA		0.00085	U	0.00070	U	0.00078	U	NA		NA		0.00082	U	0.00066	U	0.00071	U	0.00075	U	0.00067	U	NA		0.00077	U	NA		0.00082	U
	Dibromochloromethane	mg/kg	0.005	NS	NS	NA		NA		0.00085	U	0.00070	U	0.00078	U	NA		NA		0.00082	U	0.00066	U	0.00071	U	0.00075	U	0.00067	U	NA		0.00077	U	NA		0.00082	U
	1,1,2-Trichloroethane	mg/kg	0.1	NS	NS	NA		NA		0.00085	U	0.00070	U	0.00078	U	NA		NA		0.00082	U	0.00066	U	0.00071	U	0.00075	U	0.00067	U	NA		0.00077	U	NA		0.00082	U
	Tetrachloroethene	mg/kg	1	NS	NS	NA		NA		0.00043	U	0.00035	U	0.00039	U	NA		NA		0.00041	U	0.00033	U	0.00036	U	0.00037	U	0.00034	U	NA		0.0033		NA		0.0062	
	Chlorobenzene	mg/kg	1	NS	NS	NA		NA		0.00043	U	0.00035	U	0.00039	U	NA		NA		0.00041	U	0.00033	U	0.00036	U	0.00037	U	0.00034	U	NA		0.00038	U	NA		0.00041	U
	Trichlorofluoromethane	mg/kg	1,000	NS	NS	NA		NA		0.0034	U	0.0028	U	0.0031	U	NA		NA		0.0033	U	0.0026	U	0.0028	U	0.0030	U	0.0027	U	NA		0.0031	U	NA		0.0033	U
	1,2-Dichloroethane	mg/kg	0.1	NS	NS	NA		NA		0.00085	U	0.00070	U	0.00078	U	NA		NA		0.00082	U	0.00066	U	0.00071	U	0.00075	U	0.00067	U	NA		0.00077	U	NA		0.00082	U
	1,1,1-Trichloroethane	mg/kg	30	NS	NS	NA		NA		0.00043	U	0.00035	U	0.00039	U	NA		NA		0.00041	U	0.00033	U	0.00036	U	0.00037	U	0.00034	U	NA		0.00038	U	NA		0.00041	U
	Bromodichloromethane	mg/kg	0.1	NS	NS	NA		NA		0.00043	U	0.00035	U	0.00039	U	NA		NA		0.00041	U	0.00033	U	0.00036	U	0.00037	U	0.00034	U	NA		0.00038	U	NA		0.00041	U
	trans-1,3-Dichloropropene	mg/kg	0.01	NS	NS	NA		NA		0.00085	U	0.00070	U	0.00078	U	NA		NA		0.00082	U	0.00066	U	0.00071	U	0.00075	U	0.00067	U	NA		0.00077	U	NA		0.00082	U
	cis-1,3-Dichloropropene	mg/kg	0.01	NS	NS	NA		NA		0.00043	U	0.00035	U	0.00039	U	NA		NA		0.00041	U	0.00033	U	0.00036	U	0.00037	U	0.00034	U	NA		0.00038	U	NA		0.00041	U
	1,3-Dichloropropene, Total	mg/kg	0.01	NS	NS	NA		NA		0.00043	U	0.00035	U	0.00039	U	NA		NA		0.00041	U	0.00033	U	0.00036	U	0.00037	U	0.00034	U	NA		0.00038	U	NA		0.00041	U
	1,1-Dichloropropene	mg/kg	0.01	NS	NS	NA		NA		0.00043	U	0.00035	U	0.00039	U	NA		NA		0.00041	U	0.00033	U	0.00036	U	0.00037	U	0.00034	U	NA		0.00038	U	NA		0.00041	U
	Bromoform	mg/kg	0.1	NS	NS	NA		NA		0.0034	U	0.0028	U	0.0031	U	NA		NA		0.0033	U	0.0026	U	0.0028	U	0.0030	U	0.0027	U	NA		0.0031	U	NA		0.0033	U
	1,1,2,2-Tetrachloroethane	mg/kg	0.005	NS	NS	NA		NA		0.00043	U	0.00035	U	0.00039	U	NA		NA		0.00041	U	0.00033	U	0.00036	U	0.00037	U	0.00034	U	NA		0.00038	U	NA		0.00041	U
	Benzene	mg/kg	2	NS	NS	NA		NA		0.00043	U	0.00035	U	0.00039	U	NA		NA		0.00041	U	0.00033	U	0.00036	U	0.00037	U	0.00034	U	NA		0.00038	U	NA		0.00041	U
	Toluene	mg/kg	30	NS	NS	NA		NA		0.00085	U	0.00070	U	0.00078	U	NA		NA		0.00082	U	0.00066	U	0.00071	U	0.00075	U	0.00067	U	NA		0.00077	U	NA		0.00082	U
	Ethylbenzene	mg/kg	40	NS	NS	NA		NA		0.00085	U	0.00070	U	0.00078	U	NA		NA		0.00082	U	0.00066	U	0.00071	U	0.00075	U	0.00067	U	NA		0.00077	U	NA		0.00082	U
	Chloromethane	mg/kg	100	NS	NS	NA		NA		0.0034	U	0.0028	U	0.0031	U	NA		NA		0.0033	U	0.0026	U	0.0028	U	0.0030	U	0.0027	U	NA		0.0031	U	NA		0.0033	U
	Bromomethane	mg/kg	0.5	NS	NS	NA		NA		0.0017	U	0.0014	U	0.0016	U	NA		NA		0.0016	U	0.0013	U	0.0014	U	0.0015	U	0.0013	U	NA		0.0015	U	NA		0.0016	U
	Vinyl chloride	mg/kg	0.7	NS	NS	NA		NA		0.00085	U	0.00070	U	0.00078	U	NA		NA		0.00082	U	0.00066	U	0.00071	U	0.00075	U	0.00067	U	NA		0.00077	U	NA		0.00082	U
	Chloroethane	mg/kg	100	NS	NS																																

TABLE 2
Additional Characterization Soil Analytical Results
Green Line Extension Project - Washington Street
Somerville, Massachusetts

Sample Location: Sample Depth: Sample Date:						GLX-TPW-613A		GLX-TPW-614					GLX-TPW-614A		GLX-TPW-615						WASH-C15DS		WASH-NABUTDS												
						0-5 ft	0-5 ft	0-2/1 ft	2-5/4 ft	4 ft	0-5 ft	0-15 ft	1 ft	2-5/4 ft	5-8/7 ft	8-12/10 ft	12-15/13 ft	N/A	5 ft	N/A	3 ft														
						02/08/2020	10/20/2019	10/20/2019	10/20/2019	10/20/2019	02/08/2020	10/20/2019	10/20/2019	10/20/2019	10/20/2019	10/20/2019	10/20/2019	03/19/2020	03/19/2020	03/20/2020	03/20/2020														
Analysis	Analyte	Sample Location:	RCS-1	Unlined Landfill**	Lined Landfill**																														
	Naphthalene	mg/kg	4	NS	NS	NA	NA	0.0034	U	0.0028	U	0.0031	U	NA	NA	0.0033	U	0.0026	U	0.0028	U	0.0030	U	0.0027	U	NA	0.0031	U	NA	NA	0.0033	U			
	n-Propylbenzene	mg/kg	100	NS	NS	NA	NA	0.00085	U	0.00070	U	0.00078	U	NA	NA	0.00082	U	0.00066	U	0.00071	U	0.00075	U	0.00067	U	NA	0.00077	U	NA	NA	0.00082	U			
	1,2,3-Trichlorobenzene	mg/kg	NS	NS	NS	NA	NA	0.0017	U	0.0014	U	0.0016	U	NA	NA	0.0016	U	0.0013	U	0.0014	U	0.0015	U	0.0013	U	NA	0.0015	U	NA	NA	0.0016	U			
	1,2,4-Trichlorobenzene	mg/kg	2	NS	NS	NA	NA	0.0017	U	0.0014	U	0.0016	U	NA	NA	0.0016	U	0.0013	U	0.0014	U	0.0015	U	0.0013	U	NA	0.0015	U	NA	NA	0.0016	U			
	1,3,5-Trimethylbenzene	mg/kg	10	NS	NS	NA	NA	0.0017	U	0.0014	U	0.0016	U	NA	NA	0.0016	U	0.0013	U	0.0014	U	0.0015	U	0.0013	U	NA	0.0015	U	NA	NA	0.0016	U			
	1,2,4-Trimethylbenzene	mg/kg	1,000	NS	NS	NA	NA	0.0017	U	0.0014	U	0.0016	U	NA	NA	0.0016	U	0.0013	U	0.0014	U	0.0015	U	0.0013	U	NA	0.0015	U	NA	NA	0.0016	U			
	Ethyl ether	mg/kg	100	NS	NS	NA	NA	0.0017	U	0.0014	U	0.0016	U	NA	NA	0.0016	U	0.0013	U	0.0014	U	0.0015	U	0.0013	U	NA	0.0015	U	NA	NA	0.0016	U			
	Isopropyl Ether	mg/kg	100	NS	NS	NA	NA	0.0017	U	0.0014	U	0.0016	U	NA	NA	0.0016	U	0.0013	U	0.0014	U	0.0015	U	0.0013	U	NA	0.0015	U	NA	NA	0.0016	U			
	Ethyl-Tert-Butyl-Ether	mg/kg	NS	NS	NS	NA	NA	0.0017	U	0.0014	U	0.0016	U	NA	NA	0.0016	U	0.0013	U	0.0014	U	0.0015	U	0.0013	U	NA	0.0015	U	NA	NA	0.0016	U			
	Tertiary-Amyl Methyl Ether	mg/kg	NS	NS	NS	NA	NA	0.0017	U	0.0014	U	0.0016	U	NA	NA	0.0016	U	0.0013	U	0.0014	U	0.0015	U	0.0013	U	NA	0.0015	U	NA	NA	0.0016	U			
	1,4-Dioxane	mg/kg	0.2	NS	NS	NA	NA	0.068	U	0.056	U	0.062	U	NA	NA	0.065	U	0.053	U	0.057	U	0.06	U	0.054	U	NA	0.062	U	NA	NA	0.065	U			
	Total VOCs	mg/kg	N/A	4	10	NA	NA	0.066		ND		0.052		NA	NA	ND		ND		0.036		0.062		0.021		NA	0.133		NA	NA	0.0272				
SVOCs																																			
	Acenaphthene	mg/kg	4	NS	NS	0.14	U	NA	NA	NA	NA	NA	0.14	U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.15	U	NA	0.15	U	NA	NA					
	1,2,4-Trichlorobenzene	mg/kg	2	NS	NS	0.17	U	NA	NA	NA	NA	NA	0.18	U	NA	NA	NA	NA	NA	NA	NA	NA	0.18	U	NA	0.19	U	NA	NA						
	Hexachlorobenzene	mg/kg	0.7	NS	NS	0.073	U	NA	NA	NA	NA	NA	0.075	U	NA	NA	NA	NA	NA	NA	NA	NA	0.077	U	NA	0.081	U	NA	NA						
	Bis(2-chloroethyl)ether	mg/kg	0.7	NS	NS	0.073	U	NA	NA	NA	NA	NA	0.075	U	NA	NA	NA	NA	NA	NA	NA	NA	0.077	U	NA	0.081	U	NA	NA						
	2-Chloronaphthalene	mg/kg	1,000	NS	NS	0.17	U	NA	NA	NA	NA	NA	0.18	U	NA	NA	NA	NA	NA	NA	NA	NA	0.18	U	NA	0.19	U	NA	NA						
	1,2-Dichlorobenzene	mg/kg	9	NS	NS	0.17	U	NA	NA	NA	NA	NA	0.18	U	NA	NA	NA	NA	NA	NA	NA	NA	0.18	U	NA	0.19	U	NA	NA						
	1,3-Dichlorobenzene	mg/kg	3	NS	NS	0.17	U	NA	NA	NA	NA	NA	0.18	U	NA	NA	NA	NA	NA	NA	NA	NA	0.18	U	NA	0.19	U	NA	NA						
	1,4-Dichlorobenzene	mg/kg	0.7	NS	NS	0.073	U	NA	NA	NA	NA	NA	0.075	U	NA	NA	NA	NA	NA	NA	NA	NA	0.077	U	NA	0.081	U	NA	NA						
	3,3'-Dichlorobenzidine	mg/kg	3	NS	NS	0.17	U	NA	NA	NA	NA	NA	0.18	U	NA	NA	NA	NA	NA	NA	NA	NA	0.18	U	NA	0.19	U	NA	NA						
	2,4-Dinitrotoluene	mg/kg	0.7	NS	NS	0.073	U	NA	NA	NA	NA	NA	0.075	U	NA	NA	NA	NA	NA	NA	NA	NA	0.077	U	NA	0.081	U	NA	NA						
	2,6-Dinitrotoluene	mg/kg	100	NS	NS	0.17	U	NA	NA	NA	NA	NA	0.18	U	NA	NA	NA	NA	NA	NA	NA	NA	0.18	U	NA	0.19	U	NA	NA						
	Azobenzene	mg/kg	NS	NS	NS	0.17	U	NA	NA	NA	NA	NA	0.18	U	NA	NA	NA	NA	NA	NA	NA	NA	0.18	U	NA	0.19	U	NA	NA						
	Fluoranthene	mg/kg	1,000	NS	NS	0.14		NA	NA	NA	NA	NA	0.12		NA	NA	NA	NA	NA	NA	NA	NA	0.53		NA	0.7		NA							
	4-Bromophenyl phenyl ether	mg/kg	100	NS	NS	0.17	U	NA	NA	NA	NA	NA	0.18	U	NA	NA	NA	NA	NA	NA	NA	NA	0.18	U	NA	0.19	U	NA	NA						
	Bis(2-chloroisopropyl)ether	mg/kg	0.7	NS	NS	0.073	U	NA	NA	NA	NA	NA	0.075	U	NA	NA	NA	NA	NA	NA	NA	NA	0.077	U	NA	0.081	U	NA	NA						
	Bis(2-chloroethoxy)methane	mg/kg	500	NS	NS	0.19	U	NA	NA	NA	NA	NA	0.19	U	NA	NA	NA	NA	NA	NA	NA	NA	0.2	U	NA	0.21	U	NA	NA						
	Hexachlorobutadiene	mg/kg	30	NS	NS	0.17	U	NA	NA	NA	NA	NA	0.18	U	NA	NA	NA	NA	NA	NA	NA	NA	0.18	U	NA	0.19	U	NA	NA						
	Hexachloroethane	mg/kg	0.7	NS	NS	0.073	U	NA	NA	NA	NA	NA	0.075	U	NA	NA	NA	NA	NA	NA	NA	NA	0.077	U	NA	0.081	U	NA	NA						
	Isophorone	mg/kg	100	NS	NS	0.16	U	NA	NA	NA	NA	NA	0.16	U	NA	NA	NA	NA	NA	NA	NA	NA	0.16	U	NA	0.17	U	NA	NA						
	Naphthalene	mg/kg	4	NS	NS	0.17	U	NA	NA	NA	NA	NA	0.18	U	NA	NA	NA	NA	NA	NA	NA	NA	0.18	U	NA	0.19	U	NA	NA						
	Nitrobenzene	mg/kg	500	NS	NS	0.16	U	NA																											

TABLE 2
Additional Characterization Soil Analytical Results
Green Line Extension Project - Washington Street
Somerville, Massachusetts

Sample Location: Sample Depth: Sample Date:						GLX-TPW-613A		GLX-TPW-614					GLX-TPW-614A		GLX-TPW-615						WASH-C15DS		WASH-NABUTDS															
						02/08/2020						10/20/2019		10/20/2019		10/20/2019		10/20/2019		02/08/2020		10/20/2019		10/20/2019		10/20/2019		10/20/2019		03/19/2020		03/19/2020		03/20/2020		03/20/2020		
Analysis	Analyte	Sample Location:	RCS-1	Unlined Landfill**	Lined Landfill**																																	
	2,4-Dinitrophenol	mg/kg	3	NS	NS	0.84	U		NA		NA		NA		0.86	U		NA		NA		NA		NA		NA		0.88	U		NA		0.92	U		NA		
	Pentachlorophenol	mg/kg	3	NS	NS	0.35	U		NA		NA		NA		0.36	U		NA		NA		NA		NA		NA		0.37	U		NA		0.38	U		NA		
	Phenol	mg/kg	1	NS	NS	0.17	U		NA		NA		NA		0.18	U		NA		NA		NA		NA		NA		0.18	U		NA		0.19	U		NA		
	2-Methylphenol	mg/kg	500	NS	NS	0.17	U		NA		NA		NA		0.18	U		NA		NA		NA		NA		NA		0.18	U		NA		0.19	U		NA		
	3-Methylphenol/4-Methylphenol	mg/kg	NS	NS	NS	0.25	U		NA		NA		NA		0.26	U		NA		NA		NA		NA		NA		0.26	U		NA		0.28	U		NA		
	2,4,5-Trichlorophenol	mg/kg	4	NS	NS	0.17	U		NA		NA		NA		0.18	U		NA		NA		NA		NA		NA		0.18	U		NA		0.19	U		NA		
	Pyridine	mg/kg	500	NS	NS	0.19	U		NA		NA		NA		0.19	U		NA		NA		NA		NA		NA		0.2	U		NA		0.21	U		NA		
	Total SVOCs	mg/kg	N/A	100	100	0.370			NA		NA		NA		0.120			NA		NA		NA		NA		NA		3.12			NA		4.6		NA			
Pesticides																																						
	Delta-BHC	mg/kg	10	NS	NS	NA			NA		NA		NA		NA			NA		NA		NA		NA		NA		0.00175	U		NA		0.00185	U		NA		
	Lindane	mg/kg	0.003	NS	NS	NA			NA		NA		NA		NA			NA		NA		NA		NA		NA		0.000584	U		NA		0.000617	U		NA		
	Alpha-BHC	mg/kg	50	NS	NS	NA			NA		NA		NA		NA			NA		NA		NA		NA		NA		0.000730	U		NA		0.000771	U		NA		
	Beta-BHC	mg/kg	10	NS	NS	NA			NA		NA		NA		NA			NA		NA		NA		NA		NA		0.00175	U		NA		0.00185	U		NA		
	Heptachlor	mg/kg	0.3	NS	NS	NA			NA		NA		NA		NA			NA		NA		NA		NA		NA		0.000876	U		NA		0.000925	U		NA		
	Aldrin	mg/kg	0.08	NS	NS	NA			NA		NA		NA		NA			NA		NA		NA		NA		NA		0.00175	U		NA		0.00185	U		NA		
	Heptachlor epoxide	mg/kg	0.1	NS	NS	NA			NA		NA		NA		NA			NA		NA		NA		NA		NA		0.00328	U		NA		0.00347	U		NA		
	Endrin	mg/kg	10	NS	NS	NA			NA		NA		NA		NA			NA		NA		NA		NA		NA		0.000730	U		NA		0.000771	U		NA		
	Endrin ketone	mg/kg	10	NS	NS	NA			NA		NA		NA		NA			NA		NA		NA		NA		NA		0.00175	U		NA		0.00185	U		NA		
	Dieldrin	mg/kg	0.08	NS	NS	NA			NA		NA		NA		NA			NA		NA		NA		NA		NA		0.00109	U		NA		0.00116	U		NA		
	4,4'-DDE	mg/kg	6	NS	NS	NA			NA		NA		NA		NA			NA		NA		NA		NA		NA		0.00175	U		NA		0.00185	U		NA		
	4,4'-DDD	mg/kg	8	NS	NS	NA			NA		NA		NA		NA			NA		NA		NA		NA		NA		0.00175	U		NA		0.00185	U		NA		
	4,4'-DDT	mg/kg	6	NS	NS	NA			NA		NA		NA		NA			NA		NA		NA		NA		NA		0.00475			NA		0.00347	U		NA		
	Endosulfan I	mg/kg	0.5	NS	NS	NA			NA		NA		NA		NA			NA		NA		NA		NA		NA		0.00175	U		NA		0.00185	U		NA		
	Endosulfan II	mg/kg	0.5	NS	NS	NA			NA		NA		NA		NA			NA		NA		NA		NA		NA		0.00175	U		NA		0.00185	U		NA		
	Endosulfan sulfate	mg/kg	0.5	NS	NS	NA			NA		NA		NA		NA			NA		NA		NA		NA		NA		0.000730	U		NA		0.000771	U		NA		
	Methoxychlor	mg/kg	200	NS	NS	NA			NA		NA		NA		NA			NA		NA		NA		NA		NA		0.00328	U		NA		0.00347	U		NA		
	Chlordane	mg/kg	0.7	NS	NS	NA			NA		NA		NA		NA			NA		NA		NA		NA		NA		0.0146	U		NA		0.0154	U		NA		
	Hexachlorobenzene	mg/kg	0.7	NS	NS	NA			NA		NA		NA		NA			NA		NA		NA		NA		NA		0.00175	U		NA		0.00185	U		NA		
Herbicides																																						
	MCPP	mg/kg	NS	NS	NS	NA			NA		NA		NA		NA			NA		NA		NA		NA		NA		3.7	U		NA		3.8	U		NA		
	MCPA	mg/kg	100	NS	NS	NA			NA		NA		NA		NA			NA		NA		NA		NA		NA		3.7	U		NA		3.8	U		NA		
	Dalapon	mg/kg	1,000	NS	NS	NA			NA		NA		NA		NA			NA		NA		NA		NA		NA		0.037	U		NA		0.038	U		NA		
	Dicamba	mg/kg	500	NS	NS	NA			NA		NA		NA		NA			NA		NA		NA		NA		NA		0.037	U		NA		0.038	U		NA		
	Dichloroprop	mg/kg	NS	NS	NS	NA			NA		NA		NA		NA			NA		NA		NA		NA		NA		0.037	U		NA		0.038	U		NA		
	2,4-D	mg/kg	100	NS	NS	NA			NA		NA		NA		NA			NA		NA		NA		NA		NA		0.037	U		NA		0.038	U		NA		
	2,4-DB	mg/kg	100	NS	NS	NA			NA		NA		NA		NA			NA		NA		NA		NA		NA		0.037	U		NA		0.038	U		NA		
	2,4,5-T	mg/kg	100	NS	NS	NA			NA		NA		NA		NA			NA		NA		NA		NA		NA		0.037	U		NA		0.038	U		NA		
	2,4,5-TP (Silvex)	mg/kg	100	NS	NS	NA			NA		NA		NA		NA			NA		NA		NA		NA		NA		0.037	U		NA		0.038	U		NA		
PCB Aroclors																																						
	Aroclor-1016	mg/kg	1	NS	NS	NA			0.034	U		NA		NA		0.035	U		NA		NA		NA		NA		NA		0.0354	U		NA		0.0378	U		NA	
	Aroclor-1221	mg/kg	1	NS	NS	NA			0.034	U		NA		NA		0.035	U		NA		NA		NA		NA		NA		0.0354	U		NA		0.0378	U		NA	
	Aroclor-1232	mg/kg	1	NS	NS	NA			0.034	U		NA		NA		0.035	U		NA		NA		NA		NA		NA		0.0354	U		NA		0.0378	U		NA	
	Aroclor-1242	mg/kg	1	NS	NS	NA			0.034	U		NA		NA		0.035	U		NA		NA																	

TABLE 2
Additional Characterization Soil Analytical Results
Green Line Extension Project - Washington Street
Somerville, Massachusetts

Sample Location: Sample Depth: Sample Date:						GLX-TPW-613A	GLX-TPW-614				GLX-TPW-614A	GLX-TPW-615						WASH-C15DS		WASH-NABUTDS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
							Analysis	Analyte	Sample Location:	RCS-1	Unlined Landfill**	Lined Landfill**	0-5 ft	02/08/2020	0-5 ft	10/20/2019	0-2/1 ft	10/20/2019	2-5/4 ft	10/20/2019	4 ft	10/20/2019	0-5 ft	02/08/2020	0-15 ft	10/20/2019	1 ft	10/20/2019	2-5/4 ft	10/20/2019	5-8/7 ft	10/20/2019	8-12/10 ft	10/20/2019	12-15/13 ft	10/20/2019	N/A	03/19/2020	5 ft	03/19/2020	N/A	03/20/2020	3 ft	03/20/2020																																																																																																																																																																																																																																																																																																																																																																																																																																																																				

TABLE 2
Additional Characterization Soil Ananalytical Results
Green Line Extension Project - Washington Street
Somerville, Massachusetts

Sample Location: Sample Depth: Sample Date:						GLX-TPW-613A 0-5 ft		GLX-TPW-614						GLX-TPW-614A 0-5 ft		GLX-TPW-615								WASH-C15DS				WASH-NABUTDS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
								0-5 ft		0-2/1 ft		2-5/4 ft				4 ft		0-15 ft		1 ft		2-5/4 ft		5-8/7 ft		8-12/10 ft		12-15/13 ft		N/A		5 ft		N/A		3 ft																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
						02/08/2020						10/20/2019		10/20/2019		10/20/2019		10/20/2019		02/08/2020		10/20/2019		10/20/2019		10/20/2019		10/20/2019		03/19/2020		03/19/2020		03/20/2020		03/20/2020																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
Analysis	Analyte	Sample Location:	RCS-1	Unlined Landfill**	Lined Landfill**	Field Dup																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
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Notes:

mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).

mg/L - milligrams per liter.

su - Standard unit.

umhos/cm - Micro-mhos per centimeter.

E - Value exceeds calibration range.

I - The lower value for the two columns has been reported due to obvious interference.

NA - Sample not analyzed for the listed analyte.

N/A - Not available/applicable.

ND - Not detected.

NI - Not ignitable.

NS - No MassDEP standards exist for this analyte.

P - The RPD (relative percent difference) between the results for the two columns exceeds the method-specified criteria.

U - Analyte was not detected at specified quantitation limit.

Values in **bold** indicate the analyte was detected.

Values shown in bold and shaded type are equal to RCS-1 or exceed one or more of the listed MassDEP standards/criteria.

VOCs - Volatile Organic Compounds.

SVOCs - Semivolatile Organic Compounds.

PCBs - Polychlorinated Biphenyls.

TPH - Total Petroleum Hydrocarbons.

TCLP - Toxicity Characteristic Leaching Procedure.

RC - Reportable concentration.

* - EPA SW-846 Chapter 7, Table 7-1, Maximum Concentration of Contaminants for Toxicity Characteristic.

** - Reuse and Disposal of Contaminated Soil at Massachusetts Landfills, MassDEP Policy # COMM-97-001, August 1997.

^ - Sample depth for other/VOCs analysis; otherwise for all the analyses.

Table 2 - Summary of Analytical Results for Soil Samples -- 2019 and 2020
Green Line Extension Project - Washington Street
Somerville, Massachusetts

Sample Location: Sample Depth^: Sample Date:						GLX-TPW-413			GLX-TPW-414
						2 ft 4/6/2020	2 ft 4/6/2020	10 ft 4/6/2020	3 ft 4/15/2020
Analysis	Analyte	Unit	S-1/GW-1	S-1/GW-2	S-1/GW-3	Low VOC	High VOC		
VOCs									
	Methylene chloride	mg/kg	0.1	4	400	0.0066 U	0.4 U	0.003 U	0.0041 U
	1,1-Dichloroethane	mg/kg	0.4	9	500	0.0013 U	0.081 U	0.0006 U	0.00082 U
	Chloroform	mg/kg	0.4	0.2	500	0.002 U	0.12 U	0.00089 U	0.0012 U
	Carbon tetrachloride	mg/kg	10	5	30	0.0013 U	0.081 U	0.0006 U	0.00082 U
	1,2-Dichloropropane	mg/kg	0.1	0.1	30	0.0013 U	0.081 U	0.0006 U	0.00082 U
	Dibromochloromethane	mg/kg	0.005	0.03	20	0.0013 U	0.081 U	0.0006 U	0.00082 U
	1,1,2-Trichloroethane	mg/kg	0.1	2	40	0.0013 U	0.081 U	0.0006 U	0.00082 U
	Tetrachloroethene	mg/kg	1	10	30	0.0054	0.21	0.0033	0.00041 U
	Chlorobenzene	mg/kg	1	3	100	0.00066 U	0.04 U	0.0003 U	0.00041 U
	Trichlorofluoromethane	mg/kg	NS	NS	NS	0.0052 U	0.32 U	0.0024 U	0.0033 U
	1,2-Dichloroethane	mg/kg	0.1	0.1	20	0.0013 U	0.081 U	0.0006 U	0.00082 U
	1,1,1-Trichloroethane	mg/kg	30	500	500	0.00066 U	0.04 U	0.0003 U	0.00041 U
	Bromodichloromethane	mg/kg	0.1	0.1	30	0.00066 U	0.04 U	0.0003 U	0.00041 U
	trans-1,3-Dichloropropene	mg/kg	0.01(2)	0.4(2)	20(2)	0.0013 U	0.081 U	0.0006 U	0.00082 U
	cis-1,3-Dichloropropene	mg/kg	0.01(2)	0.4(2)	20(2)	0.00066 U	0.04 U	0.0003 U	0.00041 U
	1,3-Dichloropropene, Total	mg/kg	0.01	0.4	20	0.00066 U	0.04 U	0.0003 U	0.00041 U
	1,1-Dichloropropene	mg/kg	NS	NS	NS	0.00066 U	0.04 U	0.0003 U	0.00041 U
	Bromoform	mg/kg	0.1	1	300	0.0052 U	0.32 U	0.0024 U	0.0033 U
	1,1,2,2-Tetrachloroethane	mg/kg	0.005	0.02	10	0.00066 U	0.04 U	0.0003 U	0.00041 U
	Benzene	mg/kg	2	40	40	0.00066 U	0.04 U	0.0003 U	0.00041 U
	Toluene	mg/kg	30	500	500	0.0013 U	0.081 U	0.0006 U	0.00082 U
	Ethylbenzene	mg/kg	40	500	500	0.0013 U	0.081 U	0.0006 U	0.00082 U
	Chloromethane	mg/kg	NS	NS	NS	0.0052 U	0.32 U	0.0024 U	0.0033 U
	Bromomethane	mg/kg	0.5	0.5	30	0.0026 U	0.16 U	0.0012 U	0.0016 U
	Vinyl chloride	mg/kg	0.9	0.7	1	0.0013 U	0.081 U	0.0006 U	0.00082 U
	Chloroethane	mg/kg	NS	NS	NS	0.0026 U	0.16 U	0.0012 U	0.0016 U
	1,1-Dichloroethene	mg/kg	3	40	500	0.0013 U	0.081 U	0.0006 U	0.00082 U
	trans-1,2-Dichloroethene	mg/kg	1	1	500	0.002 U	0.12 U	0.00089 U	0.0012 U
	Trichloroethene	mg/kg	0.3	0.3	30	0.00066 U	0.04 U	0.0003 U	0.00041 U
	1,2-Dichlorobenzene	mg/kg	9	100	300	0.0026 U	0.16 U	0.0012 U	0.0016 U
	1,3-Dichlorobenzene	mg/kg	3	100	100	0.0026 U	0.16 U	0.0012 U	0.0016 U
	1,4-Dichlorobenzene	mg/kg	0.7	1	80	0.0026 U	0.16 U	0.0012 U	0.0016 U
	Methyl tert butyl ether	mg/kg	0.1	100	100	0.0026 U	0.16 U	0.0012 U	0.0016 U
	p/m-Xylene	mg/kg	NS	NS	NS	0.0026 U	0.16 U	0.0012 U	0.0016 U
	o-Xylene	mg/kg	NS	NS	NS	0.0013 U	0.081 U	0.0006 U	0.00082 U
	Xylenes (Total)	mg/kg	400	100	500	0.0013 U	0.081 U	0.0006 U	0.00082 U
	cis-1,2-Dichloroethene	mg/kg	0.3	0.1	100	0.0013 U	0.081 U	0.0006 U	0.00082 U
	1,2-Dichloroethene (total)	mg/kg	NS	NS	NS	0.0013 U	0.081 U	0.0006 U	0.00082 U
	Dibromomethane	mg/kg	NS	NS	NS	0.0026 U	0.16 U	0.0012 U	0.0016 U
	1,2,3-Trichloropropane	mg/kg	NS	NS	NS	0.0026 U	0.16 U	0.0012 U	0.0016 U
	Styrene	mg/kg	3	4	70	0.0013 U	0.081 U	0.0006 U	0.00082 U
	Dichlorodifluoromethane	mg/kg	NS	NS	NS	0.013 U	0.81 U	0.006 U	0.0082 U
	Acetone	mg/kg	6	50	400	0.48 E	0.81 U	0.066	0.03
	Carbon disulfide	mg/kg	NS	NS	NS	0.013 U	0.81 U	0.006 U	0.0082 U
	2-Butanone	mg/kg	4	50	400	0.013 U	0.81 U	0.006 U	0.0082 U
	4-Methyl-2-pentanone	mg/kg	0.4	50	400	0.013 U	0.81 U	0.006 U	0.0082 U
	2-Hexanone	mg/kg	NS	NS	NS	0.013 U	0.81 U	0.006 U	0.0082 U
	Bromochloromethane	mg/kg	NS	NS	NS	0.0026 U	0.16 U	0.0012 U	0.0016 U
	Tetrahydrofuran	mg/kg	NS	NS	NS	0.0052 U	0.32 U	0.0024 U	0.0033 U
	2,2-Dichloropropane	mg/kg	NS	NS	NS	0.0026 U	0.16 U	0.0012 U	0.0016 U
	1,2-Dibromoethane	mg/kg	0.1	0.1	1	0.0013 U	0.081 U	0.0006 U	0.00082 U
	1,3-Dichloropropane	mg/kg	NS	NS	NS	0.0026 U	0.16 U	0.0012 U	0.0016 U
	1,1,1,2-Tetrachloroethane	mg/kg	0.1	0.1	80	0.00066 U	0.04 U	0.0003 U	0.00041 U
	Bromobenzene	mg/kg	NS	NS	NS	0.0026 U	0.16 U	0.0012 U	0.0016 U
	n-Butylbenzene	mg/kg	100(1)	100(1)	100(1)	0.0013 U	0.081 U	0.0006 U	0.00082 U
	sec-Butylbenzene	mg/kg	100(1)	100(1)	100(1)	0.0013 U	0.081 U	0.0006 U	0.00082 U
	tert-Butylbenzene	mg/kg	100(1)	100(1)	100(1)	0.0026 U	0.16 U	0.0012 U	0.0016 U
	o-Chlorotoluene	mg/kg	NS	NS	NS	0.0026 U	0.16 U	0.0012 U	0.0016 U
	p-Chlorotoluene	mg/kg	NS	NS	NS	0.0026 U	0.16 U	0.0012 U	0.0016 U

Table 2 - Summary of Analytical Results for Soil Samples -- 2019 and 2020
Green Line Extension Project - Washington Street
Somerville, Massachusetts

Sample Location: Sample Depth^: Sample Date:						GLX-TPW-413			GLX-TPW-414
						2 ft 4/6/2020	2 ft 4/6/2020	10 ft 4/6/2020	3 ft 4/15/2020
Analysis	Analyte	Unit	S-1/GW-1	S-1/GW-2	S-1/GW-3	Low VOC	High VOC		
	1,2-Dibromo-3-chloropropane	mg/kg	NS	NS	NS	0.0039 U	0.24 U	0.0018 U	0.0024 U
	Hexachlorobutadiene	mg/kg	30	30	30	0.0052 U	0.32 U	0.0024 U	0.0033 U
	Isopropylbenzene	mg/kg	100(1)	100(1)	100(1)	0.0013 U	0.081 U	0.0006 U	0.00082 U
	p-Isopropyltoluene	mg/kg	100(1)	100(1)	100(1)	0.0013 U	0.081 U	0.0006 U	0.00082 U
	Naphthalene	mg/kg	4	20	500	0.0052 U	0.32 U	0.0024 U	0.0033 U
	n-Propylbenzene	mg/kg	100(1)	100(1)	100(1)	0.0013 U	0.081 U	0.0006 U	0.00082 U
	1,2,3-Trichlorobenzene	mg/kg	NS	NS	NS	0.0026 U	0.16 U	0.0012 U	0.0016 U
	1,2,4-Trichlorobenzene	mg/kg	2	6	700	0.0026 U	0.16 U	0.0012 U	0.0016 U
	1,3,5-Trimethylbenzene	mg/kg	100(1)	100(1)	100(1)	0.0026 U	0.16 U	0.0012 U	0.0016 U
	1,2,4-Trimethylbenzene	mg/kg	100(1)	100(1)	100(1)	0.0026 U	0.16 U	0.0012 U	0.0016 U
	Ethyl ether	mg/kg	NS	NS	NS	0.0026 U	0.16 U	0.0012 U	0.0016 U
	Isopropyl Ether	mg/kg	NS	NS	NS	0.0026 U	0.16 U	0.0012 U	0.0016 U
	Ethyl-Tert-Butyl-Ether	mg/kg	NS	NS	NS	0.0026 U	0.16 U	0.0012 U	0.0016 U
	Tertiary-Amyl Methyl Ether	mg/kg	NS	NS	NS	0.0026 U	0.16 U	0.0012 U	0.0016 U
	1,4-Dioxane	mg/kg	0.2	6	20	0.1 U	6.4 U	0.048 U	0.065 U

Notes:
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
E - Value exceeds calibration range.
N/A - Not applicable.
NS - No MassDEP standards exist for this analyte.
U - Analyte was not detected at specified quantitation limit.
Values in **bold** indicate the analyte was detected.
Values shown in bold and shaded type exceed one or more of the listed standards/criteria.
VOCs - Volatile Organic Compounds.
^ - Sample depth for other/VOCs analysis; otherwise for all the analyses.

Table 2 - Summary of Analytical Results for Soil Samples -- 2019 and 2020
Green Line Extension Project - Washington Street
Somerville, Massachusetts

Sample Location:						GLX-TPW-413					
Lab Sample ID: Sample Depth^: Sample Date:						L2014666-02 2 ft 4/6/2020		L2016435-01/ L2014666-01/ L2014666-02 0-5/2 ft 4/6/2020		L2016435-02/ L2014666-03/ L2014666-04 5-10/10 ft 4/6/2020	
Analysis	Analyte	Unit	RCS-1	Unlined Landfill*	Lined Landfill*	Low VOC		High VOC			
SVOCs	Acenaphthene	mg/kg	4	NS	NS	NA		0.16	U	0.15	U
	1,2,4-Trichlorobenzene	mg/kg	2	NS	NS	NA		0.2	U	0.19	U
	Hexachlorobenzene	mg/kg	0.7	NS	NS	NA		0.083	U	0.079	U
	Bis(2-chloroethyl)ether	mg/kg	0.7	NS	NS	NA		0.083	U	0.079	U
	2-Chloronaphthalene	mg/kg	1,000	NS	NS	NA		0.2	U	0.19	U
	1,2-Dichlorobenzene	mg/kg	9	NS	NS	NA		0.2	U	0.19	U
	1,3-Dichlorobenzene	mg/kg	3	NS	NS	NA		0.2	U	0.19	U
	1,4-Dichlorobenzene	mg/kg	0.7	NS	NS	NA		0.083	U	0.079	U
	3,3'-Dichlorobenzidine	mg/kg	3	NS	NS	NA		0.2	U	0.19	U
	2,4-Dinitrotoluene	mg/kg	0.7	NS	NS	NA		0.083	U	0.079	U
	2,6-Dinitrotoluene	mg/kg	100	NS	NS	NA		0.2	U	0.19	U
	Azobenzene	mg/kg	NS	NS	NS	NA		0.2	U	0.19	U
	Fluoranthene	mg/kg	1,000	NS	NS	NA		0.28		0.11	U
	4-Bromophenyl phenyl ether	mg/kg	100	NS	NS	NA		0.2	U	0.19	U
	Bis(2-chloroisopropyl)ether	mg/kg	0.7	NS	NS	NA		0.083	U	0.079	U
	Bis(2-chloroethoxy)methane	mg/kg	500	NS	NS	NA		0.21	U	0.2	U
	Hexachlorobutadiene	mg/kg	30	NS	NS	NA		0.2	U	0.19	U
	Hexachloroethane	mg/kg	0.7	NS	NS	NA		0.083	U	0.079	U
	Isophorone	mg/kg	100	NS	NS	NA		0.18	U	0.17	U
	Naphthalene	mg/kg	4	NS	NS	NA		0.2	U	0.19	U
	Nitrobenzene	mg/kg	500	NS	NS	NA		0.18	U	0.17	U
	Bis(2-Ethylhexyl)phthalate	mg/kg	90	NS	NS	NA		0.2	U	0.19	U
	Butyl benzyl phthalate	mg/kg	100	NS	NS	NA		0.2	U	0.19	U
	Di-n-butylphthalate	mg/kg	50	NS	NS	NA		0.2	U	0.19	U
	Di-n-octylphthalate	mg/kg	1,000	NS	NS	NA		0.2	U	0.19	U
	Diethyl phthalate	mg/kg	10	NS	NS	NA		0.2	U	0.19	U
	Dimethyl phthalate	mg/kg	0.7	NS	NS	NA		0.083	U	0.079	U
	Benzo(a)anthracene	mg/kg	7	NS	NS	NA		0.14		0.11	U
	Benzo(a)pyrene	mg/kg	2	NS	NS	NA		0.16		0.15	U
	Benzo(b)fluoranthene	mg/kg	7	NS	NS	NA		0.19		0.11	U
	Benzo(k)fluoranthene	mg/kg	70	NS	NS	NA		0.12	U	0.11	U
	Chrysene	mg/kg	70	NS	NS	NA		0.15		0.11	U
	Acenaphthylene	mg/kg	1	NS	NS	NA		0.16	U	0.15	U
	Anthracene	mg/kg	1,000	NS	NS	NA		0.12	U	0.11	U
	Benzo(ghi)perylene	mg/kg	1,000	NS	NS	NA		0.16	U	0.15	U
	Fluorene	mg/kg	1,000	NS	NS	NA		0.2	U	0.19	U
	Phenanthrene	mg/kg	10	NS	NS	NA		0.16		0.11	U
	Dibenzo(a,h)anthracene	mg/kg	0.7	NS	NS	NA		0.083	U	0.079	U
	Indeno(1,2,3-cd)Pyrene	mg/kg	7	NS	NS	NA		0.16	U	0.15	U
	Pyrene	mg/kg	1,000	NS	NS	NA		0.26		0.11	U
	Aniline	mg/kg	1,000	NS	NS	NA		0.24	U	0.22	U
	4-Chloroaniline	mg/kg	1	NS	NS	NA		0.2	U	0.19	U
	Dibenzofuran	mg/kg	100	NS	NS	NA		0.2	U	0.19	U
	2-Methylnaphthalene	mg/kg	0.7	NS	NS	NA		0.083	U	0.079	U
	Acetophenone	mg/kg	1,000	NS	NS	NA		0.2	U	0.19	U
	2,4,6-Trichlorophenol	mg/kg	0.7	NS	NS	NA		0.083	U	0.079	U
	2-Chlorophenol	mg/kg	0.7	NS	NS	NA		0.083	U	0.079	U
	2,4-Dichlorophenol	mg/kg	0.7	NS	NS	NA		0.083	U	0.079	U
	2,4-Dimethylphenol	mg/kg	0.7	NS	NS	NA		0.083	U	0.079	U
	2-Nitrophenol	mg/kg	100	NS	NS	NA		0.43	U	0.4	U
	4-Nitrophenol	mg/kg	100	NS	NS	NA		0.28	U	0.26	U
	2,4-Dinitrophenol	mg/kg	3	NS	NS	NA		0.95	U	0.9	U
	Pentachlorophenol	mg/kg	3	NS	NS	NA		0.4	U	0.38	U
	Phenol	mg/kg	1	NS	NS	NA		0.2	U	0.19	U
	2-Methylphenol	mg/kg	500	NS	NS	NA		0.2	U	0.19	U
	3-Methylphenol/4-Methylphenol	mg/kg	500	NS	NS	NA		0.28	U	0.27	U
	2,4,5-Trichlorophenol	mg/kg	4	NS	NS	NA		0.2	U	0.19	U

Table 2 - Summary of Analytical Results for Soil Samples -- 2019 and 2020
Green Line Extension Project - Washington Street
Somerville, Massachusetts

Sample Location:						GLX-TPW-413					
Lab Sample ID: Sample Depth^: Sample Date:						L2014666-02 2 ft 4/6/2020	L2016435-01/ L2014666-01/ L2014666-02 0-5/2 ft 4/6/2020	L2016435-02/ L2014666-03/ L2014666-04 5-10/10 ft 4/6/2020			
Analysis	Analyte	Unit	RCS-1	Unlined Landfill*	Lined Landfill*	Low VOC	High VOC				
	Pyridine	mg/kg	500	NS	NS	NA	0.21	U	0.2	U	
	Total SVOCs	mg/kg	N/A	100	100	NA	1.34		ND		
Pesticides											
	Delta-BHC	mg/kg	10	NS	NS	NA	0.00190	U	0.00171	U	
	Lindane	mg/kg	0.003	NS	NS	NA	0.000634	U	0.000569	U	
	Alpha-BHC	mg/kg	50	NS	NS	NA	0.000792	U	0.000711	U	
	Beta-BHC	mg/kg	10	NS	NS	NA	0.00190	U	0.00171	U	
	Heptachlor	mg/kg	0.3	NS	NS	NA	0.000951	U	0.000853	U	
	Aldrin	mg/kg	0.08	NS	NS	NA	0.00190	U	0.00171	U	
	Heptachlor epoxide	mg/kg	0.1	NS	NS	NA	0.00356	U	0.00320	U	
	Endrin	mg/kg	10	NS	NS	NA	0.000792	U	0.000711	U	
	Endrin ketone	mg/kg	NS	NS	NS	NA	0.00190	U	0.00171	U	
	Dieldrin	mg/kg	0.08	NS	NS	NA	0.00119	U	0.00107	U	
	4,4'-DDE	mg/kg	6	NS	NS	NA	0.00190	U	0.00171	U	
	4,4'-DDD	mg/kg	8	NS	NS	NA	0.00190	U	0.00171	U	
	4,4'-DDT	mg/kg	6	NS	NS	NA	0.0137		0.00320	U	
	Endosulfan I	mg/kg	0.5	NS	NS	NA	0.00190	U	0.00171	U	
	Endosulfan II	mg/kg	0.5	NS	NS	NA	0.00190	U	0.00171	U	
	Endosulfan sulfate	mg/kg	0.5	NS	NS	NA	0.000792	U	0.000711	U	
	Methoxychlor	mg/kg	200	NS	NS	NA	0.00356	U	0.00320	U	
	Chlordane	mg/kg	0.7	NS	NS	NA	0.0158	U	0.0142	U	
	Hexachlorobenzene	mg/kg	0.7	NS	NS	NA	0.00190	U	0.00171	U	
Herbicides											
	MCPP	mg/kg	NS	NS	NS	NA	4	U	3.7	U	
	MCPA	mg/kg	100	NS	NS	NA	4	U	3.7	U	
	Dalapon	mg/kg	1,000	NS	NS	NA	0.04	U	0.037	U	
	Dicamba	mg/kg	500	NS	NS	NA	0.04	U	0.037	U	
	Dichloroprop	mg/kg	NS	NS	NS	NA	0.04	U	0.037	U	
	2,4-D	mg/kg	100	NS	NS	NA	0.04	U	0.037	U	
	2,4-DB	mg/kg	100	NS	NS	NA	0.04	U	0.037	U	
	2,4,5-T	mg/kg	100	NS	NS	NA	0.04	U	0.037	U	
	2,4,5-TP (Silvex)	mg/kg	100	NS	NS	NA	0.04	U	0.037	U	
PCB Aroclors											
	Aroclor-1016	mg/kg	1	NS	NS	NA	0.0396	U	0.0364	U	
	Aroclor-1221	mg/kg	1	NS	NS	NA	0.0396	U	0.0364	U	
	Aroclor-1232	mg/kg	1	NS	NS	NA	0.0396	U	0.0364	U	
	Aroclor-1242	mg/kg	1	NS	NS	NA	0.0396	U	0.0364	U	
	Aroclor-1248	mg/kg	1	NS	NS	NA	0.0396	U	0.0364	U	
	Aroclor-1254	mg/kg	1	NS	NS	NA	0.0396	U	0.0364	U	
	Aroclor-1260	mg/kg	1	NS	NS	NA	0.0396	U	0.0364	U	
	Aroclor-1262	mg/kg	1	NS	NS	NA	0.0396	U	0.0364	U	
	Aroclor-1268	mg/kg	1	NS	NS	NA	0.0396	U	0.0364	U	
	PCBs, Total	mg/kg	1	2	2	NA	0.0396	U	0.0364	U	
TPH											
	Total Petroleum Hydrocarbons C10-C36	mg/kg	1,000	2,500	5,000	NA	39.4	U	36.7	U	
Metals, total											
	Arsenic	mg/kg	20	40	40	NA	8.37		5.91		
	Barium	mg/kg	1,000	NS	NS	NA	53.8		71.5		
	Cadmium	mg/kg	70	30	80	NA	0.458	U	0.442	U	
	Chromium	mg/kg	100	1,000	1,000	NA	24.2		37.2		
	Lead	mg/kg	200	1,000	2,000	NA	54.2		7.39		
	Mercury	mg/kg	20	10	10	NA	0.118		0.083	U	
	Selenium	mg/kg	400	NS	NS	NA	2.29	U	2.21	U	
	Silver	mg/kg	100	NS	NS	NA	0.458	U	0.442	U	
General Chemistry											
	Ignitability		NS	N/A	N/A	NA	NI		NI		
	Specific conductance	umhos/cm	NS	4,000	8,000	NA	47		21		
	pH	su	NS	>2 <12.5	>2 <12.5	NA	7.6		7.9		

Table 2 - Summary of Analytical Results for Soil Samples -- 2019 and 2020
Green Line Extension Project - Washington Street
Somerville, Massachusetts

Sample Location:						GLX-TPW-413					
Lab Sample ID:						L2014666-02		L2016435-01/		L2016435-02/	
Sample Depth^:								L2014666-01/		L2014666-03/	
Sample Date:								L2014666-02		L2014666-04	
						2 ft		0-5/2 ft		5-10/10 ft	
						4/6/2020		4/6/2020		4/6/2020	
Analysis	Analyte	Unit	RCS-1	Unlined Landfill*	Lined Landfill*	Low VOC		High VOC			
	Reactive Cyanide	mg/kg	NS	< 250	< 250	NA		10	U	10	U
	Reactive Sulfide	mg/kg	NS	< 500	< 500	NA		10	U	10	U

Notes:

mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).

mg/L - milligrams per liter.

su - Standard unit.

umhos/cm - Micro-mhos per centimeter.

E - Value exceeds calibration range.

NA - Sample not analyzed for the listed analyte.

N/A - Not available/applicable.

ND - Not detected.

NI - Not ignitable.

NS - No MassDEP standards exist for this analyte.

U - Analyte was not detected at specified quantitation limit.

Values in **bold** indicate the analyte was detected.

VOCs - Volatile Organic Compounds.

SVOCs - Semivolatile Organic Compounds.

PCBs - Polychlorinated Biphenyls.

RC - Reportable Concentration.

TPH - Total Petroleum Hydrocarbons.

* - Reuse and Disposal of Contaminated Soil at Massachusetts Landfills, MassDEP Policy # COMM-97-001, August 1997.

^ - Sample depth for other/VOCs analysis; otherwise for all the analyses.

(1) - MassDEP RC for C9-C10 aromatics used.

(2) - MassDEP RC for Dichloropropene used.

(3) - MassDEP RC for Dichloropropane used.

(4) - MassDEP RC for Chlorotoluene used.

Table 2 - Summary of Analytical Results for Soil Samples -- 2019 and 2020
Green Line Extension Project - Washington Street
Somerville, Massachusetts

LOCATION					WASH-MH212-DC-COMP		Wash-MH186-DC-Comp		
SAMPLING DATE					7/17/2020		08/07/2020		
LAB SAMPLE ID					20G1285-01		20H0388-01		
SAMPLE TYPE					SOIL		SOIL		
		CasNum	RCS-1-14	RCS-2-14	Units	Results	Qual	Results	Qual
General Chemistry									
	Specific Conductance @ 25 C	SC			umhos/cm	42		16	
	Solids, Total	TSOLIDS			%	96.1		91.5	
	pH (H)	12408-02-5			SU	4	U	7.7	
	Cyanide, Reactive	GIS-250-012			mg/kg	20	U	4	U
	Sulfide, Reactive	RSULF			mg/kg	8.9		20	U
Ignitability of Solids									
	Ignitability	IGNIT				Absent		Absent	
MCP Chlorinated Herbicides									
	2,4-D	94-75-7	100	1000	mg/kg	0.026	U	0.027	U
	2,4-DB	94-82-6	100	1000	mg/kg	0.026	U	0.027	U
	2,4,5-TP (Silvex)	93-72-1	100	1000	mg/kg	0.0026	U	0.0027	U
	2,4,5-T	93-76-5	100	1000	mg/kg	0.0026	U	0.0027	U
	Dalapon	75-99-0	1000	10000	mg/kg	0.064	U	0.067	U
	Dicamba	1918-00-9	500	5000	mg/kg	0.0026	U	0.0027	U
	Dichloroprop	120-36-5			mg/kg	0.026	U	0.027	U
	Dinoseb	88-85-7	500	5000	mg/kg	0.013	U	0.013	U
	MCPA	94-74-6	100	1000	mg/kg	2.6	U	2.7	U
	MCPP	93-65-2			mg/kg	2.6	U	2.7	U
MCP Organochlorine Pesticides									
	Aldrin	309-00-2	0.08	0.5	mg/kg	0.052	U	0.054	U
	Alpha-BHC	319-84-6	50	500	mg/kg	0.052	U	0.054	U
	Beta-BHC	319-85-7	10	100	mg/kg	0.052	U	0.054	U
	Delta-BHC	319-86-8	10	100	mg/kg	0.052	U	0.054	U
	Lindane	58-89-9	0.003	0.5	mg/kg	0.021	U	0.021	U
	Chlordane	57-74-9	0.7	30	mg/kg	0.21	U	0.21	U
	4,4'-DDD	72-54-8	8	40	mg/kg	0.042	U	0.043	U
	4,4'-DDE	72-55-9	6	30	mg/kg	0.042	U	0.043	U
	4,4'-DDT	50-29-3	6	30	mg/kg	0.21		0.043	U
	Dieldrin	60-57-1	0.08	0.5	mg/kg	0.042	U	0.043	U
	Endosulfan I	959-98-8	0.5	1	mg/kg	0.052	U	0.054	U
	Endosulfan II	33213-65-9	0.5	1	mg/kg	0.083	U	0.086	U
	Endosulfan sulfate	1031-07-8			mg/kg	0.083	U	0.086	U
	Endrin	72-20-8	10	20	mg/kg	0.083	U	0.086	U
	Endrin ketone	53494-70-5			mg/kg	0.083	U	0.086	U
	Heptachlor	76-44-8	0.3	2	mg/kg	0.052	U	0.054	U
	Heptachlor epoxide	1024-57-3	0.1	0.9	mg/kg	0.052	U	0.054	U
	Hexachlorobenzene	118-74-1	0.7	0.8	mg/kg	0.062	U	0.064	U
	Methoxychlor	72-43-5	200	400	mg/kg	0.52	U	0.54	U
MCP Polychlorinated Biphenyls									
	Aroclor 1016	12674-11-2	1	4	mg/kg	0.081	U	0.087	U
	Aroclor 1221	11104-28-2	1	4	mg/kg	0.081	U	0.087	U
	Aroclor 1232	11141-16-5	1	4	mg/kg	0.081	U	0.087	U
	Aroclor 1242	53469-21-9	1	4	mg/kg	0.081	U	0.087	U
	Aroclor 1248	12672-29-6	1	4	mg/kg	0.081	U	0.087	U
	Aroclor 1254	11097-69-1	1	4	mg/kg	0.081	U	0.087	U
	Aroclor 1260	11096-82-5	1	4	mg/kg	0.081	U	0.087	U
	Aroclor 1262	37324-23-5	1	4	mg/kg	0.081	U	0.087	U
	Aroclor 1268	11100-14-4	1	4	mg/kg	0.081	U	0.087	U
	PCBs, Total	1336-36-3	1	4	mg/kg	0.081	U	0.087	U
MCP Semivolatile Organics									
	Acenaphthene	83-32-9	4	3000	mg/kg	0.18	U	0.18	U
	Acenaphthylene	208-96-8	1	10	mg/kg	0.18	U	0.18	U
	Acetophenone	98-86-2	1000	10000	mg/kg	0.35	U	0.37	U
	Aniline	62-53-3	1000	10000	mg/kg	0.35	U	0.37	U
	Anthracene	120-12-7	1000	3000	mg/kg	0.18	U	0.18	U
	Benzo(a)anthracene	56-55-3	7	40	mg/kg	0.47		0.44	
	Benzo(a)pyrene	50-32-8	2	7	mg/kg	0.45		0.43	
	Benzo(b)fluoranthene	205-99-2	7	40	mg/kg	0.59		0.55	
	Benzo(ghi)perylene	191-24-2	1000	3000	mg/kg	0.26		0.24	
	Benzo(k)fluoranthene	207-08-9	70	400	mg/kg	0.23		0.2	
	Bis(2-chloroethoxy)methane	111-91-1	500	5000	mg/kg	0.35	U	0.37	U
	Bis(2-chloroethyl)ether	111-44-4	0.7	0.7	mg/kg	0.35	U	0.37	U
	Bis(2-chloroisopropyl)ether	39638-32-9	0.7	0.7	mg/kg	0.35	U	0.37	U
	Bis(2-ethylhexyl)phthalate	117-81-7	90	600	mg/kg	0.35	U	0.37	U
	4-Bromophenyl phenyl ether	101-55-3	100	1000	mg/kg	0.35	U	0.37	U
	Butyl benzyl phthalate	85-68-7	100	1000	mg/kg	0.35	U	0.37	U
	4-Chloroaniline	106-47-8	1	3	mg/kg	0.69	U	0.72	U
	2-Chloronaphthalene	91-58-7	1000	10000	mg/kg	0.35	U	0.37	U
	2-Chlorophenol	95-57-8	0.7	100	mg/kg	0.35	U	0.37	U
	Chrysene	218-01-9	70	400	mg/kg	0.48		0.47	
	Dibenzo(a,h)anthracene	53-70-3	0.7	4	mg/kg	0.18	U	0.18	U
	Dibenzofuran	132-64-9	100	1000	mg/kg	0.35	U	0.37	U
	Di-n-butylphthalate	84-74-2	50	500	mg/kg	0.35	U	0.37	U
	1,2-Dichlorobenzene	95-50-1	9	100	mg/kg	0.35	U	0.37	U
	1,3-Dichlorobenzene	541-73-1	3	200	mg/kg	0.35	U	0.37	U
	1,4-Dichlorobenzene	106-46-7	0.7	1	mg/kg	0.35	U	0.37	U
	3,3'-Dichlorobenzidine	91-94-1	3	20	mg/kg	0.18	U	0.18	U
	2,4-Dichlorophenol	120-83-2	0.7	40	mg/kg	0.35	U	0.37	U
	Diethyl phthalate	84-66-2	10	200	mg/kg	0.35	U	0.37	U
	2,4-Dimethylphenol	105-67-9	0.7	100	mg/kg	0.35	U	0.37	U
	Dimethyl phthalate	131-11-3	0.7	50	mg/kg	0.35	U	0.37	U
	2,4-Dinitrophenol	51-28-5	3	50	mg/kg	0.69	U	0.72	U
	2,4-Dinitrotoluene	121-14-2	0.7	10	mg/kg	0.35	U	0.37	U
	2,6-Dinitrotoluene	606-20-2	100	1000	mg/kg	0.35	U	0.37	U
	Di-n-octylphthalate	117-84-0	1000	10000	mg/kg	0.35	U	0.37	U
	Azobenzene	122-66-7	50	500	mg/kg	0.35	U	0.37	U
	Fluoranthene	206-44-0	1000	3000	mg/kg	0.92		0.84	
	Fluorene	86-73-7	1000	3000	mg/kg	0.18	U	0.18	U
	Hexachlorobenzene	118-74-1	0.7	0.8	mg/kg	0.35	U	0.37	U
	Hexachlorobutadiene	87-68-3	30	100	mg/kg	0.35	U	0.37	U
	Hexachloroethane	67-72-1	0.7	3	mg/kg	0.35	U	0.37	U
	Indeno(1,2,3-cd)pyrene	193-39-5	7	40	mg/kg	0.28		0.3	
	Isophorone	78-59-1	100	1000	mg/kg	0.35	U	0.37	U
	2-Methylnaphthalene	91-57-6	0.7	80	mg/kg	0.18	U	0.18	U
	2-Methylphenol	95-48-7	500	5000	mg/kg	0.35	U	0.37	U
	3-Methylphenol/4-Methylphenol	108-39-4/106-44-5	500	5000	mg/kg	0.35	U	0.37	U
	Naphthalene	91-20-3	4	20	mg/kg	0.18	U	0.18	U
	Nitrobenzene	98-95-3	500	5000	mg/kg	0.35	U	0.37	U
	2-Nitrophenol	88-75-5	100	1000	mg/kg	0.35	U	0.37	U
	4-Nitrophenol	100-02-7	100	1000	mg/kg	0.69	U	0.72	U
	Pentachlorophenol	87-86-5	3	10	mg/kg	0.35	U	0.37	U
	Phenanthrene	85-01-8	10	1000	mg/kg	0.62		0.6	
	Phenol	108-95-2	1	20	mg/kg	0.35	U	0.37	U
	Pyrene	129-00-0	1000	3000	mg/kg	0.87		0.92	
	Pyridine	110-86-1	500	5000	mg/kg	0.35	U	0.37	U
	1,2,4-Trichlorobenzene	120-82-1	2	6	mg/kg	0.35	U	0.37	U
	2,4,5-Trichlorophenol	95-95-4	4	600	mg/kg	0.35	U	0.37	U

Table 2 - Summary of Analytical Results for Soil Samples -- 2019 and 2020
Green Line Extension Project - Washington Street
Somerville, Massachusetts

LOCATION						WASH-MH212-DC-COMP		Wash-MH186-DC-Comp	
SAMPLING DATE						7/17/2020		08/07/2020	
LAB SAMPLE ID						20G1285-01		20H0388-01	
SAMPLE TYPE						SOIL		SOIL	
		CasNum	RCS-1-14	RCS-2-14	Units	Results	Qual	Results	Qual
	2,4,6-Trichlorophenol	88-06-2	0.7	20	mg/kg	0.35	U	0.37	U
	Total SVOCs				mg/kg	5.17		4.99	
MCP Total Metals									
	Antimony, Total	7440-36-0	20	30	mg/kg	1.7	U	1.8	U
	Arsenic, Total	7440-38-2	20	20	mg/kg	6.2		9.8	
	Barium, Total	7440-39-3	1000	3000	mg/kg	44		64	
	Beryllium, Total	7440-41-7	90	200	mg/kg	0.40		0.47	
	Cadmium, Total	7440-43-9	70	100	mg/kg	0.34	U	0.35	U
	Chromium, Total	7440-47-3	100	200	mg/kg	24		22	
	Lead, Total	7439-92-1	200	600	mg/kg	66		170	
	Mercury, Total	7439-97-6	20	30	mg/kg	0.22		0.14	
	Nickel, Total	7440-02-0	600	1000	mg/kg	22		21	
	Selenium, Total	7782-49-2	400	700	mg/kg	3.4	U	3.5	U
	Silver, Total	7440-22-4	100	200	mg/kg	0.34	U	0.35	U
	Thallium, Total	7440-28-0	8	60	mg/kg	1.7	U	1.8	U
	Vanadium, Total	7440-62-2	400	700	mg/kg	36		41	
	Zinc, Total	7440-66-6	1000	3000	mg/kg	77		90	

U - Not detected at the reported detection limit for the sample.

Table 2 - Summary of Analytical Results for Soil Samples -- 2019 and 2020
Green Line Extension Project - Washington Street
Somerville, Massachusetts

LOCATION					WASH-MH119-DC-COMP		WASH-MH281-DC-COMP	
SAMPLING DATE					8/18/2020		8/18/2020	
LAB SAMPLE ID					L2034460-01		L2034460-02	
SAMPLE TYPE					SOIL		SOIL	
	CasNum	MA-LLAND	MA-ULAND	Units	Results	Qual	Results	Qual
General Chemistry								
	Specific Conductance @ 25 C	NONE	8000	4000	umhos/cm	100	190	
	Solids, Total	NONE			%	91	91.4	
	pH (H)	12408-02-5			SU	7.8	8.1	
	Cyanide, Reactive	57-12-5			mg/kg	10	10	U
	Sulfide, Reactive	NONE			mg/kg	10	10	U
Ignitability of Solids								
	Ignitability	NONE			NI		NI	
MCP Chlorinated Herbicides								
	MCPP	93-65-2			mg/kg	3.6	3.6	U
	MCPA	94-74-6			mg/kg	3.6	3.6	U
	Dalapon	75-99-0			mg/kg	0.036	0.036	U
	Dicamba	1918-00-9			mg/kg	0.036	0.036	U
	Dichloroprop	120-36-5			mg/kg	0.036	0.036	U
	2,4-D	94-75-7			mg/kg	0.036	0.036	U
	2,4-DB	94-82-6			mg/kg	0.036	0.036	U
	2,4,5-T	93-76-5			mg/kg	0.036	0.036	U
	2,4,5-TP (Silvex)	93-72-1			mg/kg	0.036	0.036	U
MCP Organochlorine Pesticides								
	Delta-BHC	319-86-8			mg/kg	0.00174	0.00171	U
	Lindane	58-89-9			mg/kg	0.00058	0.000569	U
	Alpha-BHC	319-84-6			mg/kg	0.000724	0.000711	U
	Beta-BHC	319-85-7			mg/kg	0.00174	0.00171	U
	Heptachlor	76-44-8			mg/kg	0.000869	0.000854	U
	Aldrin	309-00-2			mg/kg	0.00174	0.00171	U
	Heptachlor epoxide	1024-57-3			mg/kg	0.00326	0.0032	U
	Endrin	72-20-8			mg/kg	0.000724	0.000711	U
	Endrin ketone	53494-70-5			mg/kg	0.00174	0.00171	U
	Dieldrin	60-57-1			mg/kg	0.00109	0.00107	U
	4,4'-DDE	72-55-9			mg/kg	0.00174	0.00171	U
	4,4'-DDD	72-54-8			mg/kg	0.00174	0.00171	U
	4,4'-DDT	50-29-3			mg/kg	0.00326	0.0032	U
	Endosulfan I	959-98-8			mg/kg	0.00174	0.00171	U
	Endosulfan II	33213-65-9			mg/kg	0.00174	0.00171	U
	Endosulfan sulfate	1031-07-8			mg/kg	0.000724	0.000711	U
	Methoxychlor	72-43-5			mg/kg	0.00326	0.0032	U
	Chlordane	57-74-9			mg/kg	0.0145	0.0142	U
	Hexachlorobenzene	118-74-1			mg/kg	0.00174	0.00171	U
MCP Polychlorinated Biphenyls								
	Aroclor 1016	12674-11-2			mg/kg	0.0357	0.0346	U
	Aroclor 1221	11104-28-2			mg/kg	0.0357	0.0346	U
	Aroclor 1232	11141-16-5			mg/kg	0.0357	0.0346	U
	Aroclor 1242	53469-21-9			mg/kg	0.0357	0.0346	U
	Aroclor 1248	12672-29-6			mg/kg	0.0357	0.0346	U
	Aroclor 1254	11097-69-1			mg/kg	0.0357	0.0346	U
	Aroclor 1260	11096-82-5			mg/kg	0.0357	0.0346	U
	Aroclor 1262	37324-23-5			mg/kg	0.0357	0.0346	U
	Aroclor 1268	11100-14-4			mg/kg	0.0357	0.0346	U
	PCBs, Total	1336-36-3	2	2	mg/kg	0.0357	0.0346	U
MCP Semivolatile Organics								
	Acenaphthene	83-32-9			mg/kg	0.14	0.14	
	1,2,4-Trichlorobenzene	120-82-1			mg/kg	0.18	0.18	U
	Hexachlorobenzene	118-74-1			mg/kg	0.076	0.076	U
	Bis(2-chloroethyl)ether	111-44-4			mg/kg	0.076	0.076	U
	2-Chloronaphthalene	91-58-7			mg/kg	0.18	0.18	U
	1,2-Dichlorobenzene	95-50-1			mg/kg	0.18	0.18	U
	1,3-Dichlorobenzene	541-73-1			mg/kg	0.18	0.18	U
	1,4-Dichlorobenzene	106-46-7			mg/kg	0.076	0.076	U
	3,3'-Dichlorobenzidine	91-94-1			mg/kg	0.18	0.18	U
	2,4-Dinitrotoluene	121-14-2			mg/kg	0.076	0.076	U
	2,6-Dinitrotoluene	606-20-2			mg/kg	0.18	0.18	U
	Azobenzene	103-33-3			mg/kg	0.18	0.18	U
	Fluoranthene	206-44-0			mg/kg	0.27	1.6	
	4-Bromophenyl phenyl ether	101-55-3			mg/kg	0.18	0.18	U
	Bis(2-chloroisopropyl)ether	108-60-1			mg/kg	0.076	0.076	U
	Bis(2-chloroethoxy)methane	111-91-1			mg/kg	0.2	0.2	U
	Hexachlorobutadiene	87-68-3			mg/kg	0.18	0.18	U
	Hexachloroethane	67-72-1			mg/kg	0.076	0.076	U
	Isophorone	78-59-1			mg/kg	0.16	0.16	U
	Naphthalene	91-20-3			mg/kg	0.18	0.57	
	Nitrobenzene	98-95-3			mg/kg	0.16	0.16	U
	Bis(2-ethylhexyl)phthalate	117-81-7			mg/kg	0.18	0.18	U
	Butyl benzyl phthalate	85-68-7			mg/kg	0.18	0.18	U
	Di-n-butylphthalate	84-74-2			mg/kg	0.18	0.18	U
	Di-n-octylphthalate	117-84-0			mg/kg	0.18	0.18	U
	Diethyl phthalate	84-66-2			mg/kg	0.18	0.18	U
	Dimethyl phthalate	131-11-3			mg/kg	0.076	0.076	U
	Benzo(a)anthracene	56-55-3			mg/kg	0.2	1.3	
	Benzo(a)pyrene	50-32-8			mg/kg	0.17	1.2	
	Benzo(b)fluoranthene	205-99-2			mg/kg	0.26	1.6	
	Benzo(k)fluoranthene	207-08-9			mg/kg	0.11	0.36	U
	Chrysene	218-01-9			mg/kg	0.16	1.1	
	Acenaphthylene	208-96-8			mg/kg	0.14	0.31	
	Anthracene	120-12-7			mg/kg	0.11	0.38	
	Benzo(ghi)perylene	191-24-2			mg/kg	0.14	0.83	
	Fluorene	86-73-7			mg/kg	0.18	0.21	
	Phenanthrene	85-01-8			mg/kg	0.14	1	
	Dibenzo(a,h)anthracene	53-70-3			mg/kg	0.076	0.19	
	Indeno(1,2,3-cd)pyrene	193-39-5			mg/kg	0.14	0.92	
	Pyrene	129-00-0			mg/kg	0.26	1.8	
	Aniline	62-53-3			mg/kg	0.22	0.22	U
	4-Chloroaniline	106-47-8			mg/kg	0.18	0.18	U
	Dibenzofuran	132-64-9			mg/kg	0.18	0.18	U
	2-Methylnaphthalene	91-57-6			mg/kg	0.076	0.29	
	Acetophenone	98-86-2			mg/kg	0.18	0.18	U
	2,4,6-Trichlorophenol	88-06-2			mg/kg	0.076	0.076	U
	2-Chlorophenol	95-57-8			mg/kg	0.076	0.076	U
	2,4-Dichlorophenol	120-83-2			mg/kg	0.076	0.076	U
	2,4-Dimethylphenol	105-67-9			mg/kg	0.076	0.076	U
	2-Nitrophenol	88-75-5			mg/kg	0.39	0.39	U
	4-Nitrophenol	100-02-7			mg/kg	0.25	0.25	U
	2,4-Dinitrophenol	51-28-5			mg/kg	0.87	0.87	U
	Pentachlorophenol	87-86-5			mg/kg	0.36	0.36	U
	Phenol	108-95-2			mg/kg	0.18	0.18	U
	2-Methylphenol	95-48-7			mg/kg	0.18	0.18	U
	3-Methylphenol/4-Methylphenol	108-39-4/106-44-5			mg/kg	0.26	0.26	U
	2,4,5-Trichlorophenol	95-95-4			mg/kg	0.18	0.18	U
	Pyridine	110-86-1			mg/kg	0.2	0.2	U
	Total SVOCs		100	100	mg/kg	1.46	13.8	
MCP Total Metals								
	Antimony, Total	7440-36-0			mg/kg	2.16	2.15	U
	Arsenic, Total	7440-38-2	40	40	mg/kg	7.55	5.48	
	Barium, Total	7440-39-3			mg/kg	38.6	41.4	
	Beryllium, Total	7440-41-7			mg/kg	0.216	0.215	U
	Cadmium, Total	7440-43-9	80	30	mg/kg	0.565	0.593	
	Chromium, Total	7440-47-3	1000	1000	mg/kg	14.3	17	

Table 2 - Summary of Analytical Results for Soil Samples -- 2019 and 2020
Green Line Extension Project - Washington Street
Somerville, Massachusetts

LOCATIO					WASH-MH119-DC-COMP		WASH-MH281-DC-COMP	
SAMPLING DATE					8/18/2020		8/18/2020	
LAB SAMPLE ID					L2034460-01		L2034460-02	
SAMPLE TYPE					SOIL		SOIL	
	CasNum	MA-LLAND	MA-ULAND	Units	Results	Qual	Results	Qual
Lead, Total	7439-92-1	2000	1000	mg/kg	53.1		96.8	
Mercury, Total	7439-97-6	10	10	mg/kg	0.342		0.165	
Nickel, Total	7440-02-0			mg/kg	11.5		13.7	
Selenium, Total	7782-49-2			mg/kg	2.16	U	2.15	U
Silver, Total	7440-22-4			mg/kg	0.431	U	0.43	U
Thallium, Total	7440-28-0			mg/kg	2.16	U	2.15	U
Vanadium, Total	7440-62-2			mg/kg	22.5		20.4	
Zinc, Total	7440-66-6			mg/kg	52.7		90.6	

Table 2 - Summary of Analytical Results for Soil Samples -- 2019 and 2020
Green Line Extension Project - Washington Street
Somerville, Massachusetts

LOCATION						WASH-MH212(A)-DC-VOC-1		WASH-MH212(B)-DC-VOC-1		WASH-MH212(C)-DC-VOC-1		WASH-MH212(D)-DC-VOC-1	
SAMPLING DATE						7/17/2020		7/17/2020		7/17/2020		7/17/2020	
LAB SAMPLE ID						20G1126-01		20G1126-02		20G1126-03		20G1126-04	
SAMPLE TYPE						SOIL		SOIL		SOIL		SOIL	
	CasNum	S-1/GW-1	S-1/GW-2	S-1/GW-3	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual
MCP Volatile Organics by EPA 5035													
Methylene chloride	75-09-2	0.1	4	400	mg/kg	0.0082	U	0.0088	U	0.0077	U	0.0088	U
1,1-Dichloroethane	75-34-3	0.4	9	500	mg/kg	0.0016	U	0.0018	U	0.0015	U	0.0018	U
Chloroform	67-66-3	0.4	0.2	500	mg/kg	0.0033	U	0.0035	U	0.0031	U	0.0035	U
Carbon tetrachloride	56-23-5	10	5	30	mg/kg	0.0016	U	0.0018	U	0.0015	U	0.0018	U
1,2-Dichloropropane	78-87-5	0.1	0.1	30	mg/kg	0.0016	U	0.0018	U	0.0015	U	0.0018	U
Dibromochloromethane	124-48-1	0.005	0.03	20	mg/kg	0.00082	U	0.00088	U	0.00077	U	0.00088	U
1,1,2-Trichloroethane	79-00-5	0.1	2	40	mg/kg	0.0016	U	0.0018	U	0.0015	U	0.0018	U
Tetrachloroethene	127-18-4	1	10	30	mg/kg	0.0048	U	0.0036	U	0.0046	U	0.0046	U
Chlorobenzene	108-90-7	1	3	100	mg/kg	0.0016	U	0.0018	U	0.0015	U	0.0018	U
Trichlorofluoromethane	75-69-4				mg/kg	0.0082	U	0.0088	U	0.0077	U	0.0088	U
1,2-Dichloroethane	107-06-2	0.1	0.1	20	mg/kg	0.0016	U	0.0018	U	0.0015	U	0.0018	U
1,1,1-Trichloroethane	71-55-6	30	500	500	mg/kg	0.0016	U	0.0018	U	0.0015	U	0.0018	U
Bromodichloromethane	75-27-4	0.1	0.1	30	mg/kg	0.0016	U	0.0018	U	0.0015	U	0.0018	U
trans-1,3-Dichloropropene	10061-02-6	0.01(2)	0.4(2)	20(2)	mg/kg	0.00082	U	0.00088	U	0.00077	U	0.00088	U
cis-1,3-Dichloropropene	10061-01-5	0.01(2)	0.4(2)	20(2)	mg/kg	0.00082	U	0.00088	U	0.00077	U	0.00088	U
1,3-Dichloropropene, Total	542-75-6	0.01	0.4	20	mg/kg	-	-	-	-	-	-	-	-
1,1,1-Dichloropropene	563-58-6	0	0	0	mg/kg	0.0016	U	0.0018	U	0.0015	U	0.0018	U
Bromoform	75-25-2	0.1	1	300	mg/kg	0.0016	U	0.0018	U	0.0015	U	0.0018	U
1,1,2,2-Tetrachloroethane	79-34-5	0.005	0.02	10	mg/kg	0.00082	U	0.00088	U	0.00077	U	0.00088	U
Benzene	71-43-2	2	40	40	mg/kg	0.0016	U	0.0018	U	0.0015	U	0.0018	U
Toluene	108-88-3	30	500	500	mg/kg	0.0016	U	0.0018	U	0.0015	U	0.0018	U
Ethylbenzene	100-41-4	40	500	500	mg/kg	0.0016	U	0.0018	U	0.0015	U	0.0018	U
Chloromethane	74-87-3				mg/kg	0.0082	U	0.0088	U	0.0077	U	0.0088	U
Bromomethane	74-83-9	0.5	0.5	30	mg/kg	0.0082	U	0.0088	U	0.0077	U	0.0088	U
Vinyl chloride	75-01-4	0.9	0.7	1	mg/kg	0.0082	U	0.0088	U	0.0077	U	0.0088	U
Chloroethane	75-00-3				mg/kg	0.0082	U	0.0088	U	0.0077	U	0.0088	U
1,1-Dichloroethene	75-35-4	3	40	500	mg/kg	0.0033	U	0.0035	U	0.0031	U	0.0035	U
trans-1,2-Dichloroethene	156-60-5	1	1	500	mg/kg	0.0016	U	0.0018	U	0.0015	U	0.0018	U
Trichloroethene	79-01-6	0.3	0.3	30	mg/kg	0.0016	U	0.0018	U	0.0015	U	0.0018	U
1,2-Dichlorobenzene	95-50-1	9	100	300	mg/kg	0.0016	U	0.0018	U	0.0015	U	0.0018	U
1,3-Dichlorobenzene	541-73-1	3	100	100	mg/kg	0.0016	U	0.0018	U	0.0015	U	0.0018	U
1,4-Dichlorobenzene	106-46-7	0.7	1	80	mg/kg	0.0016	U	0.0018	U	0.0015	U	0.0018	U
Methyl tert butyl ether	1634-04-4	0.1	100	100	mg/kg	0.0033	U	0.0035	U	0.0031	U	0.0035	U
p/m-Xylene	179601-23-1	400(3)	100(3)	500(3)	mg/kg	0.0033	U	0.0035	U	0.0031	U	0.0035	U
o-Xylene	95-47-6	400(3)	100(3)	500(3)	mg/kg	0.0016	U	0.0018	U	0.0015	U	0.0018	U
Xylenes, Total	1330-20-7	400	100	500	mg/kg	0.0033	U	0.0035	U	0.0031	U	0.0035	U
cis-1,2-Dichloroethene	156-59-2	0.3	0.1	100	mg/kg	0.0016	U	0.0018	U	0.0015	U	0.0018	U
1,2-Dichloroethene, Total	540-59-0				mg/kg	-	-	-	-	-	-	-	-
Dibromomethane	74-95-3				mg/kg	0.0016	U	0.0018	U	0.0015	U	0.0018	U
1,2,3-Trichloropropane	96-18-4				mg/kg	0.0016	U	0.0018	U	0.0015	U	0.0018	U
Styrene	100-42-5	3	4	70	mg/kg	0.0016	U	0.0018	U	0.0015	U	0.0018	U
Dichlorodifluoromethane	75-71-8				mg/kg	0.0082	U	0.0088	U	0.0077	U	0.0088	U
Acetone	67-64-1	6	50	400	mg/kg	0.21	U	0.088	U	0.31	U	0.20	U
Carbon disulfide	75-15-0				mg/kg	0.0049	U	0.0053	U	0.0046	U	0.0053	U
Methyl ethyl ketone	78-93-3	4	50	400	mg/kg	0.033	U	0.035	U	0.031	U	0.035	U
Methyl isobutyl ketone	108-10-1	0.4	50	400	mg/kg	0.016	U	0.018	U	0.015	U	0.018	U
2-Hexanone	591-78-6				mg/kg	0.016	U	0.018	U	0.015	U	0.018	U
Bromochloromethane	74-97-5				mg/kg	0.0016	U	0.0018	U	0.0015	U	0.0018	U
Tetrahydrofuran	109-99-9				mg/kg	0.0082	U	0.0088	U	0.0077	U	0.0088	U
2,2-Dichloropropane	594-20-7	0	0	0	mg/kg	0.0016	U	0.0018	U	0.0015	U	0.0018	U
1,2-Dibromoethane	106-93-4	0.1	0.1	1	mg/kg	0.00082	U	0.00088	U	0.00077	U	0.00088	U
1,3-Dichloropropane	142-28-9				mg/kg	0.00082	U	0.00088	U	0.00077	U	0.00088	U
1,1,1,2-Tetrachloroethane	630-20-6	0.1	0.1	80	mg/kg	0.0016	U	0.0018	U	0.0015	U	0.0018	U
Bromobenzene	108-86-1				mg/kg	0.0016	U	0.0018	U	0.0015	U	0.0018	U
n-Butylbenzene	104-51-8	100(1)	100(1)	100(1)	mg/kg	0.0016	U	0.0018	U	0.0015	U	0.0018	U
sec-Butylbenzene	135-98-8	100(1)	100(1)	100(1)	mg/kg	0.0016	U	0.0018	U	0.0015	U	0.0018	U
tert-Butylbenzene	98-06-6	100(1)	100(1)	100(1)	mg/kg	0.0016	U	0.0018	U	0.0015	U	0.0018	U

Table 2 - Summary of Analytical Results for Soil Samples -- 2019 and 2020
Green Line Extension Project - Washington Street
Somerville, Massachusetts

LOCATION						WASH-MH212(A)-DC-VOC-1	WASH-MH212(B)-DC-VOC-1	WASH-MH212(C)-DC-VOC-1	WASH-MH212(D)-DC-VOC-1
SAMPLING DATE						7/17/2020	7/17/2020	7/17/2020	7/17/2020
LAB SAMPLE ID						20G1126-01	20G1126-02	20G1126-03	20G1126-04
SAMPLE TYPE						SOIL	SOIL	SOIL	SOIL
	CasNum	S-1/GW-1	S-1/GW-2	S-1/GW-3	Units	Results	Qual	Results	Qual
o-Chlorotoluene	95-49-8				mg/kg	0.0016	U	0.0018	U
p-Chlorotoluene	106-43-4				mg/kg	0.0016	U	0.0018	U
1,2-Dibromo-3-chloropropane	96-12-8				mg/kg	0.0016	U	0.0018	U
Hexachlorobutadiene	87-68-3	30	30	30	mg/kg	0.0016	U	0.0018	U
Isopropylbenzene	98-82-8	100(1)	100(1)	100(1)	mg/kg	0.0016	U	0.0018	U
p-Isopropyltoluene	99-87-6	100(1)	100(1)	100(1)	mg/kg	0.0016	U	0.0018	U
Naphthalene	91-20-3	4	20	500	mg/kg	0.0033	U	0.0035	U
n-Propylbenzene	103-65-1	100(1)	100(1)	100(1)	mg/kg	0.0016	U	0.0018	U
1,2,3-Trichlorobenzene	87-61-6				mg/kg	0.0016	U	0.0018	U
1,2,4-Trichlorobenzene	120-82-1	2	6	700	mg/kg	0.0016	U	0.0018	U
1,3,5-Trimethylbenzene	108-67-8	100(1)	100(1)	100(1)	mg/kg	0.0016	U	0.0018	U
1,2,4-Trimethylbenzene	95-63-6	100(1)	100(1)	100(1)	mg/kg	0.0016	U	0.0018	U
Diethyl ether	60-29-7				mg/kg	0.0082	U	0.0088	U
Diisopropyl Ether	108-20-3				mg/kg	0.00082	U	0.00088	U
Ethyl-Tert-Butyl-Ether	637-92-3				mg/kg	0.00082	U	0.00088	U
Tertiary-Amyl Methyl Ether	994-05-8				mg/kg	0.00082	U	0.00077	U
1,4-Dioxane	123-91-1	0.2	6	20	mg/kg	0.082	U	0.088	U

mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).

U - Not detected at the reported detection limit for the sample.

- Not analyzed.

(1) - Value for C9-C10 aromatics used.

(2) -Value for 1,3-Dichloropropene used.

(3) - Criteria applicable to xylene (total), the sum of the xylene isomers.

Table 2 - Summary of Analytical Results for Soil Samples -- 2019 and 2020
Green Line Extension Project - Washington Street
Somerville, Massachusetts

LOCATION						WASH-MH212(E)-DC-VOC-1	WASH-MH212(F)-DC-VOC-1	WASH-MH212(G)-DC-VOC-1	Wash-MH186(A)-DC-VOC	Wash-MH186(B)-DC-VOC			
SAMPLING DATE						7/17/2020	7/17/2020	7/17/2020	8/7/2020	8/7/2020			
LAB SAMPLE ID						20G1126-05	20G1126-06	20G1126-07	20H0387-01	20H0387-02			
SAMPLE TYPE						SOIL	SOIL	SOIL	SOIL	SOIL			
	CasNum	S-1/GW-1	S-1/GW-2	S-1/GW-3	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual
MCP Volatile Organics by EPA 5035													
Methylene chloride	75-09-2	0.1	4	400	mg/kg	0.007	U	0.0085	U	0.011	U	0.0083	U
1,1-Dichloroethane	75-34-3	0.4	9	500	mg/kg	0.0014	U	0.0017	U	0.0022	U	0.0017	U
Chloroform	67-66-3	0.4	0.2	500	mg/kg	0.0028	U	0.0034	U	0.0044	U	0.0033	U
Carbon tetrachloride	56-23-5	10	5	30	mg/kg	0.0014	U	0.0017	U	0.0022	U	0.0017	U
1,2-Dichloropropane	78-87-5	0.1	0.1	30	mg/kg	0.0014	U	0.0017	U	0.0022	U	0.0017	U
Dibromochloromethane	124-48-1	0.005	0.03	20	mg/kg	0.0007	U	0.00085	U	0.0011	U	0.00083	U
1,1,2-Trichloroethane	79-00-5	0.1	2	40	mg/kg	0.0014	U	0.0017	U	0.0022	U	0.0017	U
Tetrachloroethene	127-18-4	1	10	30	mg/kg	0.0043	U	0.0051	U	0.0022	U	0.0094	U
Chlorobenzene	108-90-7	1	3	100	mg/kg	0.0014	U	0.0017	U	0.0022	U	0.0017	U
Trichlorofluoromethane	75-69-4				mg/kg	0.007	U	0.0085	U	0.011	U	0.0083	U
1,2-Dichloroethane	107-06-2	0.1	0.1	20	mg/kg	0.0014	U	0.0017	U	0.0022	U	0.0017	U
1,1,1-Trichloroethane	71-55-6	30	500	500	mg/kg	0.0014	U	0.0017	U	0.0022	U	0.0017	U
Bromodichloromethane	75-27-4	0.1	0.1	30	mg/kg	0.0014	U	0.0017	U	0.0022	U	0.0017	U
trans-1,3-Dichloropropene	10061-02-6	0.01(2)	0.4(2)	20(2)	mg/kg	0.0007	U	0.00085	U	0.0011	U	0.00083	U
cis-1,3-Dichloropropene	10061-01-5	0.01(2)	0.4(2)	20(2)	mg/kg	0.0007	U	0.00085	U	0.0011	U	0.00083	U
1,3-Dichloropropene, Total	542-75-6	0.01	0.4	20	mg/kg	-	-	-	-	-	-	-	-
1,1-Dichloropropene	563-58-6	0	0	0	mg/kg	0.0014	U	0.0017	U	0.0022	U	0.0017	U
Bromoform	75-25-2	0.1	1	300	mg/kg	0.0014	U	0.0017	U	0.0022	U	0.0017	U
1,1,2,2-Tetrachloroethane	79-34-5	0.005	0.02	10	mg/kg	0.0007	U	0.00085	U	0.0011	U	0.00083	U
Benzene	71-43-2	2	40	40	mg/kg	0.0014	U	0.0017	U	0.0022	U	0.0017	U
Toluene	108-88-3	30	500	500	mg/kg	0.0014	U	0.0017	U	0.0022	U	0.0017	U
Ethylbenzene	100-41-4	40	500	500	mg/kg	0.0014	U	0.0017	U	0.0022	U	0.0017	U
Chloromethane	74-87-3				mg/kg	0.007	U	0.0085	U	0.011	U	0.0083	U
Bromomethane	74-83-9	0.5	0.5	30	mg/kg	0.007	U	0.0085	U	0.011	U	0.0083	U
Vinyl chloride	75-01-4	0.9	0.7	1	mg/kg	0.007	U	0.0085	U	0.011	U	0.0083	U
Chloroethane	75-00-3				mg/kg	0.007	U	0.0085	U	0.011	U	0.0083	U
1,1-Dichloroethene	75-35-4	3	40	500	mg/kg	0.0028	U	0.0034	U	0.0044	U	0.0033	U
trans-1,2-Dichloroethene	156-60-5	1	1	500	mg/kg	0.0014	U	0.0017	U	0.0022	U	0.0017	U
Trichloroethene	79-01-6	0.3	0.3	30	mg/kg	0.0014	U	0.0017	U	0.0022	U	0.0021	U
1,2-Dichlorobenzene	95-50-1	9	100	300	mg/kg	0.0014	U	0.0017	U	0.0022	U	0.0017	U
1,3-Dichlorobenzene	541-73-1	3	100	100	mg/kg	0.0014	U	0.0017	U	0.0022	U	0.0017	U
1,4-Dichlorobenzene	106-46-7	0.7	1	80	mg/kg	0.0014	U	0.0017	U	0.0022	U	0.0017	U
Methyl tert butyl ether	1634-04-4	0.1	100	100	mg/kg	0.0028	U	0.0034	U	0.0044	U	0.0033	U
p/m-Xylene	179601-23-1	400(3)	100(3)	500(3)	mg/kg	0.0028	U	0.0034	U	0.0044	U	0.0033	U
o-Xylene	95-47-6	400(3)	100(3)	500(3)	mg/kg	0.0014	U	0.0017	U	0.0022	U	0.0017	U
Xylenes, Total	1330-20-7	400	100	500	mg/kg	0.0028	U	0.0034	U	0.0044	U	0.0033	U
cis-1,2-Dichloroethene	156-59-2	0.3	0.1	100	mg/kg	0.0014	U	0.0017	U	0.0022	U	0.0044	U
1,2-Dichloroethene, Total	540-59-0				mg/kg	-	-	-	-	-	-	-	-
Dibromomethane	74-95-3				mg/kg	0.0014	U	0.0017	U	0.0022	U	0.0017	U
1,2,3-Trichloropropane	96-18-4				mg/kg	0.0014	U	0.0017	U	0.0022	U	0.0017	U
Styrene	100-42-5	3	4	70	mg/kg	0.0014	U	0.0017	U	0.0022	U	0.0017	U
Dichlorodifluoromethane	75-71-8				mg/kg	0.007	U	0.0085	U	0.011	U	0.0083	U
Acetone	67-64-1	6	50	400	mg/kg	0.19	U	0.085	U	0.16	U	0.083	U
Carbon disulfide	75-15-0				mg/kg	0.0042	U	0.0051	U	0.0066	U	0.005	U
Methyl ethyl ketone	78-93-3	4	50	400	mg/kg	0.028	U	0.034	U	0.044	U	0.033	U
Methyl isobutyl ketone	108-10-1	0.4	50	400	mg/kg	0.014	U	0.017	U	0.022	U	0.017	U
2-Hexanone	591-78-6				mg/kg	0.014	U	0.017	U	0.022	U	0.017	U
Bromochloromethane	74-97-5				mg/kg	0.0014	U	0.0017	U	0.0022	U	0.0017	U
Tetrahydrofuran	109-99-9				mg/kg	0.007	U	0.0085	U	0.011	U	0.0083	U
2,2-Dichloropropane	594-20-7	0	0	0	mg/kg	0.0014	U	0.0017	U	0.0022	U	0.0017	U
1,2-Dibromoethane	106-93-4	0.1	0.1	1	mg/kg	0.0007	U	0.00085	U	0.0011	U	0.00083	U
1,3-Dichloropropane	142-28-9				mg/kg	0.0007	U	0.00085	U	0.0011	U	0.00083	U
1,1,1,2-Tetrachloroethane	630-20-6	0.1	0.1	80	mg/kg	0.0014	U	0.0017	U	0.0022	U	0.0017	U
Bromobenzene	108-86-1				mg/kg	0.0014	U	0.0017	U	0.0022	U	0.0017	U
n-Butylbenzene	104-51-8	100(1)	100(1)	100(1)	mg/kg	0.0014	U	0.0017	U	0.0022	U	0.0017	U
sec-Butylbenzene	135-98-8	100(1)	100(1)	100(1)	mg/kg	0.0014	U	0.0017	U	0.0022	U	0.0017	U
tert-Butylbenzene	98-06-6	100(1)	100(1)	100(1)	mg/kg	0.0014	U	0.0017	U	0.0022	U	0.0017	U

Table 2 - Summary of Analytical Results for Soil Samples -- 2019 and 2020
Green Line Extension Project - Washington Street
Somerville, Massachusetts

LOCATION						WASH-MH212(E)-DC-VOC-1	WASH-MH212(F)-DC-VOC-1	WASH-MH212(G)-DC-VOC-1	Wash-MH186(A)-DC-VOC	Wash-MH186(B)-DC-VOC				
SAMPLING DATE						7/17/2020	7/17/2020	7/17/2020	8/7/2020	8/7/2020				
LAB SAMPLE ID						20G1126-05	20G1126-06	20G1126-07	20H0387-01	20H0387-02				
SAMPLE TYPE						SOIL	SOIL	SOIL	SOIL	SOIL				
	CasNum	S-1/GW-1	S-1/GW-2	S-1/GW-3	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results
o-Chlorotoluene	95-49-8				mg/kg	0.0014	U	0.0017	U	0.0022	U	0.0017	U	0.0021
p-Chlorotoluene	106-43-4				mg/kg	0.0014	U	0.0017	U	0.0022	U	0.0017	U	0.0021
1,2-Dibromo-3-chloropropane	96-12-8				mg/kg	0.0014	U	0.0017	U	0.0022	U	0.0017	U	0.0021
Hexachlorobutadiene	87-68-3	30	30	30	mg/kg	0.0014	U	0.0017	U	0.0022	U	0.0017	U	0.0021
isopropylbenzene	98-82-8	100(1)	100(1)	100(1)	mg/kg	0.0014	U	0.0017	U	0.0022	U	0.0017	U	0.0021
p-Isopropyltoluene	99-87-6	100(1)	100(1)	100(1)	mg/kg	0.0014	U	0.0017	U	0.0022	U	0.0017	U	0.0021
Naphthalene	91-20-3	4	20	500	mg/kg	0.0028	U	0.0034	U	0.0044	U	0.0033	U	0.0041
n-Propylbenzene	103-65-1	100(1)	100(1)	100(1)	mg/kg	0.0014	U	0.0017	U	0.0022	U	0.0017	U	0.0021
1,2,3-Trichlorobenzene	87-61-6				mg/kg	0.0014	U	0.0017	U	0.0022	U	0.0017	U	0.0021
1,2,4-Trichlorobenzene	120-82-1	2	6	700	mg/kg	0.0014	U	0.0017	U	0.0022	U	0.0017	U	0.0021
1,3,5-Trimethylbenzene	108-67-8	100(1)	100(1)	100(1)	mg/kg	0.0014	U	0.0017	U	0.0022	U	0.0017	U	0.0021
1,2,4-Trimethylbenzene	95-63-6	100(1)	100(1)	100(1)	mg/kg	0.0014	U	0.0017	U	0.0022	U	0.0017	U	0.0021
Diethyl ether	60-29-7				mg/kg	0.007	U	0.0085	U	0.011	U	0.0083	U	0.01
Diisopropyl Ether	108-20-3				mg/kg	0.0007	U	0.00085	U	0.0011	U	0.00083	U	0.001
Ethyl-Tert-Butyl-Ether	637-92-3				mg/kg	0.0007	U	0.00085	U	0.0011	U	0.00083	U	0.001
Tertiary-Amyl Methyl Ether	994-05-8				mg/kg	0.0007	U	0.00085	U	0.0011	U	0.00083	U	0.001
1,4-Dioxane	123-91-1	0.2	6	20	mg/kg	0.07	U	0.085	U	0.11	U	0.083	U	0.1

mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).

U - Not detected at the reported detection limit for the sample.

- Not analyzed.

(1) - Value for C9-C10 aromatics used.

(2) -Value for 1,3-Dichloropropene used.

(3) - Criteria applicable to xylene (total), the sum of the xylene isomers.

Table 2 - Summary of Analytical Results for Soil Samples -- 2019 and 2020
Green Line Extension Project - Washington Street
Somerville, Massachusetts

LOCATION							Wash-MH186(C)-DC-VOC		WASH-MH119A-DC-VOC		WASH-MH119B-DC-VOC		WASH-MH119C-DC-VOC		WASH-MH281A-DC-VOC	
SAMPLING DATE							8/7/2020		8/18/2020		8/18/2020		8/18/2020		8/18/2020	
LAB SAMPLE ID							20H0387-03		L2033621-02		L2033621-03		L2033621-04		L2033621-06	
SAMPLE TYPE							SOIL		SOIL		SOIL		SOIL		SOIL	
	CasNum	S-1/GW-1	S-1/GW-2	S-1/GW-3	Units	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
MCP Volatile Organics by EPA 5035																
Methylene chloride	75-09-2	0.1	4	400	mg/kg	U	0.011	U	0.0038	U	0.005	U	0.0042	U	0.0041	U
1,1-Dichloroethane	75-34-3	0.4	9	500	mg/kg	U	0.0023	U	0.00076	U	0.001	U	0.00083	U	0.00083	U
Chloroform	67-66-3	0.4	0.2	500	mg/kg	U	0.0046	U	0.0011	U	0.0015	U	0.0012	U	0.0012	U
Carbon tetrachloride	56-23-5	10	5	30	mg/kg	U	0.0023	U	0.00076	U	0.001	U	0.00083	U	0.00083	U
1,2-Dichloropropane	78-87-5	0.1	0.1	30	mg/kg	U	0.0023	U	0.00076	U	0.001	U	0.00083	U	0.00083	U
Dibromochloromethane	124-48-1	0.005	0.03	20	mg/kg	U	0.0011	U	0.00076	U	0.001	U	0.00083	U	0.00083	U
1,1,2-Trichloroethane	79-00-5	0.1	2	40	mg/kg	U	0.0023	U	0.00076	U	0.001	U	0.00083	U	0.00083	U
Tetrachloroethene	127-18-4	1	10	30	mg/kg	U	0.010	U	0.0038	U	0.0066	U	0.003	U	0.0018	U
Chlorobenzene	108-90-7	1	3	100	mg/kg	U	0.0023	U	0.00038	U	0.0005	U	0.00042	U	0.00041	U
Trichlorofluoromethane	75-69-4				mg/kg	U	0.011	U	0.003	U	0.004	U	0.0033	U	0.0033	U
1,2-Dichloroethane	107-06-2	0.1	0.1	20	mg/kg	U	0.0023	U	0.00076	U	0.001	U	0.00083	U	0.00083	U
1,1,1-Trichloroethane	71-55-6	30	500	500	mg/kg	U	0.0023	U	0.00038	U	0.0005	U	0.00042	U	0.00041	U
Bromodichloromethane	75-27-4	0.1	0.1	30	mg/kg	U	0.0023	U	0.00038	U	0.0005	U	0.00042	U	0.00041	U
trans-1,3-Dichloropropene	10061-02-6	0.01(2)	0.4(2)	20(2)	mg/kg	U	0.0011	U	0.00076	U	0.001	U	0.00083	U	0.00083	U
cis-1,3-Dichloropropene	10061-01-5	0.01(2)	0.4(2)	20(2)	mg/kg	U	0.0011	U	0.00038	U	0.0005	U	0.00042	U	0.00041	U
1,3-Dichloropropene, Total	542-75-6	0.01	0.4	20	mg/kg	-	-	-	0.00038	U	0.0005	U	0.00042	U	0.00041	U
1,1-Dichloropropene	563-58-6	0	0	0	mg/kg	U	0.0023	U	0.00038	U	0.0005	U	0.00042	U	0.00041	U
Bromoform	75-25-2	0.1	1	300	mg/kg	U	0.0023	U	0.003	U	0.004	U	0.0033	U	0.0033	U
1,1,2,2-Tetrachloroethane	79-34-5	0.005	0.02	10	mg/kg	U	0.0011	U	0.00038	U	0.0005	U	0.00042	U	0.00041	U
Benzene	71-43-2	2	40	40	mg/kg	U	0.0023	U	0.0007	U	0.0005	U	0.00045	U	0.00048	U
Toluene	108-88-3	30	500	500	mg/kg	U	0.0023	U	0.00076	U	0.001	U	0.00083	U	0.00083	U
Ethylbenzene	100-41-4	40	500	500	mg/kg	U	0.0023	U	0.00076	U	0.001	U	0.00083	U	0.00083	U
Chloromethane	74-87-3				mg/kg	U	0.011	U	0.003	U	0.004	U	0.0033	U	0.0033	U
Bromomethane	74-83-9	0.5	0.5	30	mg/kg	U	0.011	U	0.0015	U	0.002	U	0.0017	U	0.0016	U
Vinyl chloride	75-01-4	0.9	0.7	1	mg/kg	U	0.011	U	0.00076	U	0.001	U	0.00083	U	0.00083	U
Chloroethane	75-00-3				mg/kg	U	0.011	U	0.0015	U	0.002	U	0.0017	U	0.0016	U
1,1-Dichloroethene	75-35-4	3	40	500	mg/kg	U	0.0046	U	0.00076	U	0.001	U	0.00083	U	0.00083	U
trans-1,2-Dichloroethene	156-60-5	1	1	500	mg/kg	U	0.0023	U	0.0011	U	0.0015	U	0.0012	U	0.0012	U
Trichloroethene	79-01-6	0.3	0.3	30	mg/kg	U	0.0023	U	0.00062	U	0.00078	U	0.00042	U	0.00041	U
1,2-Dichlorobenzene	95-50-1	9	100	300	mg/kg	U	0.0023	U	0.0015	U	0.002	U	0.0017	U	0.0016	U
1,3-Dichlorobenzene	541-73-1	3	100	100	mg/kg	U	0.0023	U	0.0015	U	0.002	U	0.0017	U	0.0016	U
1,4-Dichlorobenzene	106-46-7	0.7	1	80	mg/kg	U	0.0023	U	0.0015	U	0.002	U	0.0017	U	0.0016	U
Methyl tert butyl ether	1634-04-4	0.1	100	100	mg/kg	U	0.0046	U	0.0015	U	0.002	U	0.0017	U	0.0016	U
p/m-Xylene	179601-23-1	400(3)	100(3)	500(3)	mg/kg	U	0.0046	U	0.0015	U	0.002	U	0.0017	U	0.0016	U
o-Xylene	95-47-6	400(3)	100(3)	500(3)	mg/kg	U	0.0023	U	0.00076	U	0.001	U	0.00083	U	0.00083	U
Xylenes, Total	1330-20-7	400	100	500	mg/kg	U	0.0046	U	0.00076	U	0.001	U	0.00083	U	0.00083	U
cis-1,2-Dichloroethene	156-59-2	0.3	0.1	100	mg/kg	U	0.0023	U	0.00077	U	0.001	U	0.00083	U	0.00083	U
1,2-Dichloroethene, Total	540-59-0				mg/kg	-	-	-	0.00077	U	0.001	U	0.00083	U	0.00083	U
Dibromomethane	74-95-3				mg/kg	U	0.0023	U	0.0015	U	0.002	U	0.0017	U	0.0016	U
1,2,3-Trichloropropane	96-18-4				mg/kg	U	0.0023	U	0.0015	U	0.002	U	0.0017	U	0.0016	U
Styrene	100-42-5	3	4	70	mg/kg	U	0.0023	U	0.00076	U	0.001	U	0.00083	U	0.00083	U
Dichlorodifluoromethane	75-71-8				mg/kg	U	0.011	U	0.0076	U	0.01	U	0.0083	U	0.0083	U
Acetone	67-64-1	6	50	400	mg/kg	U	0.11	U	0.028	U	0.025	U	0.026	U	0.028	U
Carbon disulfide	75-15-0				mg/kg	U	0.0069	U	0.0076	U	0.01	U	0.0083	U	0.0083	U
Methyl ethyl ketone	78-93-3	4	50	400	mg/kg	U	0.046	U	0.0076	U	0.01	U	0.0083	U	0.0083	U
Methyl isobutyl ketone	108-10-1	0.4	50	400	mg/kg	U	0.023	U	0.0076	U	0.01	U	0.0083	U	0.0083	U
2-Hexanone	591-78-6				mg/kg	U	0.023	U	0.0076	U	0.01	U	0.0083	U	0.0083	U
Bromochloromethane	74-97-5				mg/kg	U	0.0023	U	0.0015	U	0.002	U	0.0017	U	0.0016	U
Tetrahydrofuran	109-99-9				mg/kg	U	0.011	U	0.003	U	0.004	U	0.0033	U	0.0033	U
2,2-Dichloropropane	594-20-7	0	0	0	mg/kg	U	0.0023	U	0.0015	U	0.002	U	0.0017	U	0.0016	U
1,2-Dibromoethane	106-93-4	0.1	0.1	1	mg/kg	U	0.0011	U	0.00076	U	0.001	U	0.00083	U	0.00083	U
1,3-Dichloropropane	142-28-9				mg/kg	U	0.0011	U	0.0015	U	0.002	U	0.0017	U	0.0016	U
1,1,1,2-Tetrachloroethane	630-20-6	0.1	0.1	80	mg/kg	U	0.0023	U	0.00038	U	0.0005	U	0.00042	U	0.00041	U
Bromobenzene	108-86-1				mg/kg	U	0.0023	U	0.0015	U	0.002	U	0.0017	U	0.0016	U
n-Butylbenzene	104-51-8	100(1)	100(1)	100(1)	mg/kg	U	0.0023	U	0.00076	U	0.001	U	0.00083	U	0.00083	U
sec-Butylbenzene	135-98-8	100(1)	100(1)	100(1)	mg/kg	U	0.0023	U	0.00076	U	0.001	U	0.00083	U	0.00083	U
tert-Butylbenzene	98-06-6	100(1)	100(1)	100(1)	mg/kg	U	0.0023	U	0.0015	U	0.002	U	0.0017	U	0.0016	U

Table 2 - Summary of Analytical Results for Soil Samples -- 2019 and 2020
Green Line Extension Project - Washington Street
Somerville, Massachusetts

LOCATION							Wash-MH186(C)-DC-VOC		WASH-MH119A-DC-VOC		WASH-MH119B-DC-VOC		WASH-MH119C-DC-VOC		WASH-MH281A-DC-VOC	
SAMPLING DATE							8/7/2020		8/18/2020		8/18/2020		8/18/2020		8/18/2020	
LAB SAMPLE ID							20H0387-03		L2033621-02		L2033621-03		L2033621-04		L2033621-06	
SAMPLE TYPE							SOIL		SOIL		SOIL		SOIL		SOIL	
	CasNum	S-1/GW-1	S-1/GW-2	S-1/GW-3	Units	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
o-Chlorotoluene	95-49-8				mg/kg	U	0.0023	U	0.0015	U	0.002	U	0.0017	U	0.0016	U
p-Chlorotoluene	106-43-4				mg/kg	U	0.0023	U	0.0015	U	0.002	U	0.0017	U	0.0016	U
1,2-Dibromo-3-chloropropane	96-12-8				mg/kg	U	0.0023	U	0.0023	U	0.003	U	0.0025	U	0.0025	U
Hexachlorobutadiene	87-68-3	30	30	30	mg/kg	U	0.0023	U	0.003	U	0.004	U	0.0033	U	0.0033	U
Isopropylbenzene	98-82-8	100(1)	100(1)	100(1)	mg/kg	U	0.0023	U	0.00076	U	0.001	U	0.00083	U	0.00083	U
p-Isopropyltoluene	99-87-6	100(1)	100(1)	100(1)	mg/kg	U	0.0023	U	0.00076	U	0.001	U	0.00083	U	0.00083	U
Naphthalene	91-20-3	4	20	500	mg/kg	U	0.0046	U	0.003	U	0.004	U	0.0033	U	0.0033	U
n-Propylbenzene	103-65-1	100(1)	100(1)	100(1)	mg/kg	U	0.0023	U	0.00076	U	0.001	U	0.00083	U	0.00083	U
1,2,3-Trichlorobenzene	87-61-6				mg/kg	U	0.0023	U	0.0015	U	0.002	U	0.0017	U	0.0016	U
1,2,4-Trichlorobenzene	120-82-1	2	6	700	mg/kg	U	0.0023	U	0.0015	U	0.002	U	0.0017	U	0.0016	U
1,3,5-Trimethylbenzene	108-67-8	100(1)	100(1)	100(1)	mg/kg	U	0.0023	U	0.0015	U	0.002	U	0.0017	U	0.0016	U
1,2,4-Trimethylbenzene	95-63-6	100(1)	100(1)	100(1)	mg/kg	U	0.0023	U	0.0015	U	0.002	U	0.0017	U	0.0016	U
Diethyl ether	60-29-7				mg/kg	U	0.011	U	0.0015	U	0.002	U	0.0017	U	0.0016	U
Diisopropyl Ether	108-20-3				mg/kg	U	0.0011	U	0.0015	U	0.002	U	0.0017	U	0.0016	U
Ethyl-Tert-Butyl-Ether	637-92-3				mg/kg	U	0.0011	U	0.0015	U	0.002	U	0.0017	U	0.0016	U
Tertiary-Amyl Methyl Ether	994-05-8				mg/kg	U	0.0011	U	0.0015	U	0.002	U	0.0017	U	0.0016	U
1,4-Dioxane	123-91-1	0.2	6	20	mg/kg	U	0.11	U	0.061	U	0.08	U	0.067	U	0.066	U

mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).

U - Not detected at the reported detection limit for the sample.

- Not analyzed.

(1) - Value for C9-C10 aromatics used.

(2) - Value for 1,3-Dichloropropene used.

(3) - Criteria applicable to xylene (total), the sum of the xylene isomers.

Table 2 - Summary of Analytical Results for Soil Samples -- 2019 and 2020
Green Line Extension Project - Washington Street
Somerville, Massachusetts

LOCATION						WASH-MH281B-DC-VOC		WASH-MH281C-DC-VOC		WASH-MH281D-DC-VOC	
SAMPLING DATE						8/18/2020		8/18/2020		8/18/2020	
LAB SAMPLE ID						L2033621-07		L2033621-08		L2033621-09	
SAMPLE TYPE						SOIL		SOIL		SOIL	
	CasNum	S-1/GW-1	S-1/GW-2	S-1/GW-3	Units	Results	Qual	Results	Qual	Results	Qual
MCP Volatile Organics by EPA 5035											
Methylene chloride	75-09-2	0.1	4	400	mg/kg	0.0044	U	0.0038	U	0.0041	U
1,1-Dichloroethane	75-34-3	0.4	9	500	mg/kg	0.00089	U	0.00077	U	0.00083	U
Chloroform	67-66-3	0.4	0.2	500	mg/kg	0.0013	U	0.0012	U	0.0012	U
Carbon tetrachloride	56-23-5	10	5	30	mg/kg	0.00089	U	0.00077	U	0.00083	U
1,2-Dichloropropane	78-87-5	0.1	0.1	30	mg/kg	0.00089	U	0.00077	U	0.00083	U
Dibromochloromethane	124-48-1	0.005	0.03	20	mg/kg	0.00089	U	0.00077	U	0.00083	U
1,1,2-Trichloroethane	79-00-5	0.1	2	40	mg/kg	0.00089	U	0.00077	U	0.00083	U
Tetrachloroethene	127-18-4	1	10	30	mg/kg	0.0013	U	0.0013	U	0.0014	U
Chlorobenzene	108-90-7	1	3	100	mg/kg	0.00044	U	0.00038	U	0.00041	U
Trichlorofluoromethane	75-69-4				mg/kg	0.0036	U	0.0031	U	0.0033	U
1,2-Dichloroethane	107-06-2	0.1	0.1	20	mg/kg	0.00089	U	0.00077	U	0.00083	U
1,1,1-Trichloroethane	71-55-6	30	500	500	mg/kg	0.00044	U	0.00038	U	0.00041	U
Bromodichloromethane	75-27-4	0.1	0.1	30	mg/kg	0.00044	U	0.00038	U	0.00041	U
trans-1,3-Dichloropropene	10061-02-6	0.01(2)	0.4(2)	20(2)	mg/kg	0.00089	U	0.00077	U	0.00083	U
cis-1,3-Dichloropropene	10061-01-5	0.01(2)	0.4(2)	20(2)	mg/kg	0.00044	U	0.00038	U	0.00041	U
1,3-Dichloropropene, Total	542-75-6	0.01	0.4	20	mg/kg	0.00044	U	0.00038	U	0.00041	U
1,1-Dichloropropene	563-58-6	0	0	0	mg/kg	0.00044	U	0.00038	U	0.00041	U
Bromoform	75-25-2	0.1	1	300	mg/kg	0.0036	U	0.0031	U	0.0033	U
1,1,2,2-Tetrachloroethane	79-34-5	0.005	0.02	10	mg/kg	0.00044	U	0.00038	U	0.00041	U
Benzene	71-43-2	2	40	40	mg/kg	0.00066	U	0.00068	U	0.00054	U
Toluene	108-88-3	30	500	500	mg/kg	0.00089	U	0.00077	U	0.00083	U
Ethylbenzene	100-41-4	40	500	500	mg/kg	0.00089	U	0.00077	U	0.00083	U
Chloromethane	74-87-3				mg/kg	0.0036	U	0.0031	U	0.0033	U
Bromomethane	74-83-9	0.5	0.5	30	mg/kg	0.0018	U	0.0015	U	0.0016	U
Vinyl chloride	75-01-4	0.9	0.7	1	mg/kg	0.00089	U	0.00077	U	0.00083	U
Chloroethane	75-00-3				mg/kg	0.0018	U	0.0015	U	0.0016	U
1,1-Dichloroethene	75-35-4	3	40	500	mg/kg	0.00089	U	0.00077	U	0.00083	U
trans-1,2-Dichloroethene	156-60-5	1	1	500	mg/kg	0.0013	U	0.0012	U	0.0012	U
Trichloroethene	79-01-6	0.3	0.3	30	mg/kg	0.00044	U	0.00038	U	0.00046	U
1,2-Dichlorobenzene	95-50-1	9	100	300	mg/kg	0.0018	U	0.0015	U	0.0016	U
1,3-Dichlorobenzene	541-73-1	3	100	100	mg/kg	0.0018	U	0.0015	U	0.0016	U
1,4-Dichlorobenzene	106-46-7	0.7	1	80	mg/kg	0.0018	U	0.0015	U	0.0016	U
Methyl tert butyl ether	1634-04-4	0.1	100	100	mg/kg	0.0018	U	0.0015	U	0.0016	U
p/m-Xylene	179601-23-1	400(3)	100(3)	500(3)	mg/kg	0.0018	U	0.0015	U	0.0016	U
o-Xylene	95-47-6	400(3)	100(3)	500(3)	mg/kg	0.00089	U	0.00077	U	0.00083	U
Xylenes, Total	1330-20-7	400	100	500	mg/kg	0.00089	U	0.00077	U	0.00083	U
cis-1,2-Dichloroethene	156-59-2	0.3	0.1	100	mg/kg	0.00089	U	0.00077	U	0.00083	U
1,2-Dichloroethene, Total	540-59-0				mg/kg	0.00089	U	0.00077	U	0.00083	U
Dibromomethane	74-95-3				mg/kg	0.0018	U	0.0015	U	0.0016	U
1,2,3-Trichloropropane	96-18-4				mg/kg	0.0018	U	0.0015	U	0.0016	U
Styrene	100-42-5	3	4	70	mg/kg	0.00089	U	0.00077	U	0.00083	U
Dichlorodifluoromethane	75-71-8				mg/kg	0.0089	U	0.0077	U	0.0083	U
Acetone	67-64-1	6	50	400	mg/kg	0.037	U	0.032	U	0.036	U
Carbon disulfide	75-15-0				mg/kg	0.0089	U	0.0077	U	0.0083	U
Methyl ethyl ketone	78-93-3	4	50	400	mg/kg	0.0089	U	0.0077	U	0.0083	U
Methyl isobutyl ketone	108-10-1	0.4	50	400	mg/kg	0.0089	U	0.0077	U	0.0083	U
2-Hexanone	591-78-6				mg/kg	0.0089	U	0.0077	U	0.0083	U
Bromochloromethane	74-97-5				mg/kg	0.0018	U	0.0015	U	0.0016	U
Tetrahydrofuran	109-99-9				mg/kg	0.0036	U	0.0031	U	0.0033	U
2,2-Dichloropropane	594-20-7	0	0	0	mg/kg	0.0018	U	0.0015	U	0.0016	U
1,2-Dibromoethane	106-93-4	0.1	0.1	1	mg/kg	0.00089	U	0.00077	U	0.00083	U
1,3-Dichloropropane	142-28-9				mg/kg	0.0018	U	0.0015	U	0.0016	U
1,1,1,2-Tetrachloroethane	630-20-6	0.1	0.1	80	mg/kg	0.00044	U	0.00038	U	0.00041	U
Bromobenzene	108-86-1				mg/kg	0.0018	U	0.0015	U	0.0016	U
n-Butylbenzene	104-51-8	100(1)	100(1)	100(1)	mg/kg	0.00089	U	0.00077	U	0.00083	U
sec-Butylbenzene	135-98-8	100(1)	100(1)	100(1)	mg/kg	0.00089	U	0.00077	U	0.00083	U
tert-Butylbenzene	98-06-6	100(1)	100(1)	100(1)	mg/kg	0.0018	U	0.0015	U	0.0016	U

Table 2 - Summary of Analytical Results for Soil Samples -- 2019 and 2020
Green Line Extension Project - Washington Street
Somerville, Massachusetts

LOCATION							WASH-MH281B-DC-VOC	WASH-MH281C-DC-VOC	WASH-MH281D-DC-VOC
SAMPLING DATE							8/18/2020	8/18/2020	8/18/2020
LAB SAMPLE ID							L2033621-07	L2033621-08	L2033621-09
SAMPLE TYPE							SOIL	SOIL	SOIL
	CasNum	S-1/GW-1	S-1/GW-2	S-1/GW-3	Units	Results	Qual	Results	Qual
o-Chlorotoluene	95-49-8				mg/kg	0.0018	U	0.0015	U
p-Chlorotoluene	106-43-4				mg/kg	0.0018	U	0.0015	U
1,2-Dibromo-3-chloropropane	96-12-8				mg/kg	0.0027	U	0.0023	U
Hexachlorobutadiene	87-68-3	30	30	30	mg/kg	0.0036	U	0.0031	U
Isopropylbenzene	98-82-8	100(1)	100(1)	100(1)	mg/kg	0.00089	U	0.00077	U
p-Isopropyltoluene	99-87-6	100(1)	100(1)	100(1)	mg/kg	0.00089	U	0.00077	U
Naphthalene	91-20-3	4	20	500	mg/kg	0.0036	U	0.0031	U
n-Propylbenzene	103-65-1	100(1)	100(1)	100(1)	mg/kg	0.00089	U	0.00077	U
1,2,3-Trichlorobenzene	87-61-6				mg/kg	0.0018	U	0.0015	U
1,2,4-Trichlorobenzene	120-82-1	2	6	700	mg/kg	0.0018	U	0.0015	U
1,3,5-Trimethylbenzene	108-67-8	100(1)	100(1)	100(1)	mg/kg	0.0018	U	0.0015	U
1,2,4-Trimethylbenzene	95-63-6	100(1)	100(1)	100(1)	mg/kg	0.0018	U	0.0015	U
Diethyl ether	60-29-7				mg/kg	0.0018	U	0.0015	U
Diisopropyl Ether	108-20-3				mg/kg	0.0018	U	0.0015	U
Ethyl-Tert-Butyl-Ether	637-92-3				mg/kg	0.0018	U	0.0015	U
Tertiary-Amyl Methyl Ether	994-05-8				mg/kg	0.0018	U	0.0015	U
1,4-Dioxane	123-91-1	0.2	6	20	mg/kg	0.071	U	0.062	U

mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).

U - Not detected at the reported detection limit for the sample.

- Not analyzed.

(1) - Value for C9-C10 aromatics used.

(2) - Value for 1,3-Dichloropropene used.

(3) - Criteria applicable to xylene (total), the sum of the xylene isomers.

Table 2 - Soil Characterization Analytical Results
Washington Street - RTN 3-34742
Somerville, Massachusetts

Sample Location: Sample Name: Lab Sample ID: Sample Date:						GLC-311B-21-DC				GLC-301B-07-DC			
						GLC-311B-21-DC-COMP		GLC-311B-21-DC-VOC-2		GLC-301B-07-DC-COMP		GLC-301B-07-DC-VOC-3	
						L2049316-03		L2049316-04		L2049316-05		L2049316-06	
						11/9/2020		11/9/2020		11/9/2020		11/9/2020	
Analysis	Analyte	Units	RCS-1	MA Unlined Landfill*	MA Lined Landfill*								
VOCs													
	Methylene chloride	mg/kg	0.1	NS	NS	NA		0.0041	U	NA		0.0049	U
	1,1-Dichloroethane	mg/kg	0.4	NS	NS	NA		0.00083	U	NA		0.00099	U
	Chloroform	mg/kg	0.2	NS	NS	NA		0.0012	U	NA		0.0015	U
	Carbon tetrachloride	mg/kg	5	NS	NS	NA		0.00083	U	NA		0.00099	U
	1,2-Dichloropropane	mg/kg	0.1	NS	NS	NA		0.00083	U	NA		0.00099	U
	Dibromochloromethane	mg/kg	0.005	NS	NS	NA		0.00083	U	NA		0.00099	U
	1,1,2-Trichloroethane	mg/kg	0.1	NS	NS	NA		0.00083	U	NA		0.00099	U
	Tetrachloroethene	mg/kg	1	NS	NS	NA		0.00061		NA		0.00056	
	Chlorobenzene	mg/kg	1	NS	NS	NA		0.00041	U	NA		0.00049	U
	Trichlorofluoromethane	mg/kg	1,000	NS	NS	NA		0.0033	U	NA		0.004	U
	1,2-Dichloroethane	mg/kg	0.1	NS	NS	NA		0.00083	U	NA		0.00099	U
	1,1,1-Trichloroethane	mg/kg	30	NS	NS	NA		0.00041	U	NA		0.00049	U
	Bromodichloromethane	mg/kg	0.1	NS	NS	NA		0.00041	U	NA		0.00049	U
	trans-1,3-Dichloropropene	mg/kg	0.01	NS	NS	NA		0.00083	U	NA		0.00099	U
	cis-1,3-Dichloropropene	mg/kg	0.01	NS	NS	NA		0.00041	U	NA		0.00049	U
	1,3-Dichloropropene, Total	mg/kg	0.01	NS	NS	NA		0.00041	U	NA		0.00049	U
	1,1-Dichloropropene	mg/kg	0.01(4)	NS	NS	NA		0.00041	U	NA		0.00049	U
	Bromoform	mg/kg	0.1	NS	NS	NA		0.0033	U	NA		0.004	U
	1,1,2,2-Tetrachloroethane	mg/kg	0.005	NS	NS	NA		0.00041	U	NA		0.00049	U
	Benzene	mg/kg	2	NS	NS	NA		0.00041	U	NA		0.00049	U
	Toluene	mg/kg	30	NS	NS	NA		0.00083	U	NA		0.00099	U
	Ethylbenzene	mg/kg	40	NS	NS	NA		0.00083	U	NA		0.00099	U
	Chloromethane	mg/kg	100	NS	NS	NA		0.0033	U	NA		0.004	U
	Bromomethane	mg/kg	0.5	NS	NS	NA		0.0016	U	NA		0.002	U
	Vinyl chloride	mg/kg	0.7	NS	NS	NA		0.00083	U	NA		0.00099	U
	Chloroethane	mg/kg	100	NS	NS	NA		0.0016	U	NA		0.002	U
	1,1-Dichloroethene	mg/kg	3	NS	NS	NA		0.00083	U	NA		0.00099	U
	trans-1,2-Dichloroethene	mg/kg	1	NS	NS	NA		0.0012	U	NA		0.0015	U
	Trichloroethene	mg/kg	0.3	NS	NS	NA		0.00041	U	NA		0.00049	U
	1,2-Dichlorobenzene	mg/kg	9	NS	NS	NA		0.0016	U	NA		0.002	U
	1,3-Dichlorobenzene	mg/kg	3	NS	NS	NA		0.0016	U	NA		0.002	U
	1,4-Dichlorobenzene	mg/kg	0.7	NS	NS	NA		0.0016	U	NA		0.002	U
	Methyl tert butyl ether	mg/kg	0.1	NS	NS	NA		0.0016	U	NA		0.002	U
	p/m-Xylene	mg/kg	100(2)	NS	NS	NA		0.0016	U	NA		0.002	U
	o-Xylene	mg/kg	100(2)	NS	NS	NA		0.00083	U	NA		0.00099	U
	Xylenes, Total	mg/kg	100	NS	NS	NA		0.00083	U	NA		0.00099	U
	cis-1,2-Dichloroethene	mg/kg	0.1	NS	NS	NA		0.00083	U	NA		0.00099	U
	1,2-Dichloroethene, Total	mg/kg	0.3	NS	NS	NA		0.00083	U	NA		0.00099	U
	Dibromomethane	mg/kg	500	NS	NS	NA		0.0016	U	NA		0.002	U
	1,2,3-Trichloropropane	mg/kg	100	NS	NS	NA		0.0016	U	NA		0.002	U
	Styrene	mg/kg	3	NS	NS	NA		0.00083	U	NA		0.00099	U
	Dichlorodifluoromethane	mg/kg	1,000	NS	NS	NA		0.0083	U	NA		0.0099	U
	Acetone	mg/kg	6	NS	NS	NA		0.021	U	NA		0.025	U
	Carbon disulfide	mg/kg	100	NS	NS	NA		0.0083	U	NA		0.0099	U
	Methyl ethyl ketone	mg/kg	4	NS	NS	NA		0.0083	U	NA		0.0099	U
	Methyl isobutyl ketone	mg/kg	0.4	NS	NS	NA		0.0083	U	NA		0.0099	U
	2-Hexanone	mg/kg	100	NS	NS	NA		0.0083	U	NA		0.0099	U
	Bromochloromethane	mg/kg	NS	NS	NS	NA		0.0016	U	NA		0.002	U
	Tetrahydrofuran	mg/kg	500	NS	NS	NA		0.0033	U	NA		0.004	U
	2,2-Dichloropropane	mg/kg	0.1(3)	NS	NS	NA		0.0016	U	NA		0.002	U
	1,2-Dibromoethane	mg/kg	0.1	NS	NS	NA		0.00083	U	NA		0.00099	U
	1,3-Dichloropropane	mg/kg	500	NS	NS	NA		0.0016	U	NA		0.002	U
	1,1,1,2-Tetrachloroethane	mg/kg	0.1	NS	NS	NA		0.00041	U	NA		0.00049	U
	Bromobenzene	mg/kg	100	NS	NS	NA		0.0016	U	NA		0.002	U
	n-Butylbenzene	mg/kg	100(1)	NS	NS	NA		0.00083	U	NA		0.00099	U
	sec-Butylbenzene	mg/kg	100(1)	NS	NS	NA		0.00083	U	NA		0.00099	U
	tert-Butylbenzene	mg/kg	100	NS	NS	NA		0.0016	U	NA		0.002	U
	o-Chlorotoluene	mg/kg	100	NS	NS	NA		0.0016	U	NA		0.002	U
	p-Chlorotoluene	mg/kg	100(5)	NS	NS	NA		0.0016	U	NA		0.002	U

Table 2 - Soil Characterization Analytical Results
Washington Street - RTN 3-34742
Somerville, Massachusetts

Sample Location: Sample Name: Lab Sample ID: Sample Date:						GLC-311B-21-DC				GLC-301B-07-DC			
						GLC-311B-21-DC-COMP		GLC-311B-21-DC-VOC-2		GLC-301B-07-DC-COMP		GLC-301B-07-DC-VOC-3	
						L2049316-03		L2049316-04		L2049316-05		L2049316-06	
						11/9/2020		11/9/2020		11/9/2020		11/9/2020	
Analysis	Analyte	Units	RCS-1	MA Unlined Landfill*	MA Lined Landfill*								
	1,2-Dibromo-3-chloropropane	mg/kg	10	NS	NS	NA		0.0025	U	NA		0.003	U
	Hexachlorobutadiene	mg/kg	30	NS	NS	NA		0.0033	U	NA		0.004	U
	Isopropylbenzene	mg/kg	1,000	NS	NS	NA		0.00083	U	NA		0.00099	U
	p-Isopropyltoluene	mg/kg	100	NS	NS	NA		0.00083	U	NA		0.00099	U
	Naphthalene	mg/kg	4	NS	NS	NA		0.0033	U	NA		0.004	U
	n-Propylbenzene	mg/kg	100	NS	NS	NA		0.00083	U	NA		0.00099	U
	1,2,3-Trichlorobenzene	mg/kg	NS	NS	NS	NA		0.0016	U	NA		0.002	U
	1,2,4-Trichlorobenzene	mg/kg	2	NS	NS	NA		0.0016	U	NA		0.002	U
	1,3,5-Trimethylbenzene	mg/kg	10	NS	NS	NA		0.0016	U	NA		0.002	U
	1,2,4-Trimethylbenzene	mg/kg	1,000	NS	NS	NA		0.0016	U	NA		0.002	U
	Diethyl ether	mg/kg	100	NS	NS	NA		0.0016	U	NA		0.002	U
	Diisopropyl Ether	mg/kg	100	NS	NS	NA		0.0016	U	NA		0.002	U
	Ethyl-Tert-Butyl-Ether	mg/kg	NS	NS	NS	NA		0.0016	U	NA		0.002	U
	Tertiary-Amyl Methyl Ether	mg/kg	NS	NS	NS	NA		0.0016	U	NA		0.002	U
	1,4-Dioxane	mg/kg	0.2	NS	NS	NA		0.066	U	NA		0.079	U
	Total VOCs	mg/kg	NS	4	10	NA		0.00061		NA		0.00056	
SVOCs													
	Acenaphthene	mg/kg	4	NS	NS	0.15	U	NA		0.14	U	NA	
	1,2,4-Trichlorobenzene	mg/kg	2	NS	NS	0.19	U	NA		0.18	U	NA	
	Hexachlorobenzene	mg/kg	0.7	NS	NS	0.08	U	NA		0.074	U	NA	
	Bis(2-chloroethyl)ether	mg/kg	0.7	NS	NS	0.08	U	NA		0.074	U	NA	
	2-Chloronaphthalene	mg/kg	1,000	NS	NS	0.19	U	NA		0.18	U	NA	
	1,2-Dichlorobenzene	mg/kg	9	NS	NS	0.19	U	NA		0.18	U	NA	
	1,3-Dichlorobenzene	mg/kg	3	NS	NS	0.19	U	NA		0.18	U	NA	
	1,4-Dichlorobenzene	mg/kg	0.7	NS	NS	0.08	U	NA		0.074	U	NA	
	3,3'-Dichlorobenzidine	mg/kg	3	NS	NS	0.19	U	NA		0.18	U	NA	
	2,4-Dinitrotoluene	mg/kg	0.7	NS	NS	0.08	U	NA		0.074	U	NA	
	2,6-Dinitrotoluene	mg/kg	100	NS	NS	0.19	U	NA		0.18	U	NA	
	Azobenzene	mg/kg	50	NS	NS	0.19	U	NA		0.18	U	NA	
	Fluoranthene	mg/kg	1,000	NS	NS	2.3		NA		0.58		NA	
	4-Bromophenyl phenyl ether	mg/kg	100	NS	NS	0.19	U	NA		0.18	U	NA	
	Bis(2-chloroisopropyl)ether	mg/kg	0.7	NS	NS	0.08	U	NA		0.074	U	NA	
	Bis(2-chloroethoxy)methane	mg/kg	500	NS	NS	0.21	U	NA		0.19	U	NA	
	Hexachlorobutadiene	mg/kg	30	NS	NS	0.19	U	NA		0.18	U	NA	
	Hexachloroethane	mg/kg	0.7	NS	NS	0.08	U	NA		0.074	U	NA	
	Isophorone	mg/kg	100	NS	NS	0.17	U	NA		0.16	U	NA	
	Naphthalene	mg/kg	4	NS	NS	0.31		NA		0.18	U	NA	
	Nitrobenzene	mg/kg	500	NS	NS	0.17	U	NA		0.16	U	NA	
	Bis(2-ethylhexyl)phthalate	mg/kg	90	NS	NS	0.19	U	NA		0.18	U	NA	
	Butyl benzyl phthalate	mg/kg	100	NS	NS	0.19	U	NA		0.18	U	NA	
	Di-n-butylphthalate	mg/kg	50	NS	NS	0.19	U	NA		0.18	U	NA	
	Di-n-octylphthalate	mg/kg	1,000	NS	NS	0.19	U	NA		0.18	U	NA	
	Diethyl phthalate	mg/kg	10	NS	NS	0.19	U	NA		0.18	U	NA	
	Dimethyl phthalate	mg/kg	0.7	NS	NS	0.08	U	NA		0.074	U	NA	
	Benzo(a)anthracene	mg/kg	7	NS	NS	1		NA		0.28		NA	
	Benzo(a)pyrene	mg/kg	2	NS	NS	0.86		NA		0.25		NA	
	Benzo(b)fluoranthene	mg/kg	7	NS	NS	1.1		NA		0.32		NA	
	Benzo(k)fluoranthene	mg/kg	70	NS	NS	0.3		NA		0.1	U	NA	
	Chrysene	mg/kg	70	NS	NS	0.99		NA		0.26		NA	
	Acenaphthylene	mg/kg	1	NS	NS	0.15	U	NA		0.14	U	NA	
	Anthracene	mg/kg	1,000	NS	NS	0.45		NA		0.1		NA	
	Benzo(ghi)perylene	mg/kg	1,000	NS	NS	0.46		NA		0.14		NA	
	Fluorene	mg/kg	1,000	NS	NS	0.19	U	NA		0.18	U	NA	
	Phenanthrene	mg/kg	10	NS	NS	1.7		NA		0.4		NA	
	Dibenzo(a,h)anthracene	mg/kg	0.7	NS	NS	0.13		NA		0.074	U	NA	
	Indeno(1,2,3-cd)pyrene	mg/kg	7	NS	NS	0.54		NA		0.17		NA	
	Pyrene	mg/kg	1,000	NS	NS	2		NA		0.52		NA	
	Aniline	mg/kg	1,000	NS	NS	0.23	U	NA		0.21	U	NA	
	4-Chloroaniline	mg/kg	1	NS	NS	0.19	U	NA		0.18	U	NA	
	Dibenzofuran	mg/kg	100	NS	NS	0.2		NA		0.18	U	NA	
	2-Methylnaphthalene	mg/kg	0.7	NS	NS	0.26		NA		0.074	U	NA	

Table 2 - Soil Characterization Analytical Results
Washington Street - RTN 3-34742
Somerville, Massachusetts

Sample Location: Sample Name: Lab Sample ID: Sample Date:						GLC-311B-21-DC				GLC-301B-07-DC			
						GLC-311B-21-DC-COMP		GLC-311B-21-DC-VOC-2		GLC-301B-07-DC-COMP		GLC-301B-07-DC-VOC-3	
						L2049316-03		L2049316-04		L2049316-05		L2049316-06	
						11/9/2020		11/9/2020		11/9/2020		11/9/2020	
Analysis	Analyte	Units	RCS-1	MA Unlined Landfill*	MA Lined Landfill*								
	Acetophenone	mg/kg	1,000	NS	NS	0.19	U	NA		0.18	U	NA	
	2,4,6-Trichlorophenol	mg/kg	0.7	NS	NS	0.08	U	NA		0.074	U	NA	
	2-Chlorophenol	mg/kg	0.7	NS	NS	0.08	U	NA		0.074	U	NA	
	2,4-Dichlorophenol	mg/kg	0.7	NS	NS	0.08	U	NA		0.074	U	NA	
	2,4-Dimethylphenol	mg/kg	0.7	NS	NS	0.08	U	NA		0.074	U	NA	
	2-Nitrophenol	mg/kg	100	NS	NS	0.41	U	NA		0.38	U	NA	
	4-Nitrophenol	mg/kg	100	NS	NS	0.27	U	NA		0.25	U	NA	
	2,4-Dinitrophenol	mg/kg	3	NS	NS	0.92	U	NA		0.85	U	NA	
	Pentachlorophenol	mg/kg	3	NS	NS	0.38	U	NA		0.35	U	NA	
	Phenol	mg/kg	1	NS	NS	0.19	U	NA		0.18	U	NA	
	2-Methylphenol	mg/kg	500	NS	NS	0.19	U	NA		0.18	U	NA	
	3-Methylphenol/4-Methylphenol	mg/kg	500	NS	NS	0.28	U	NA		0.25	U	NA	
	2,4,5-Trichlorophenol	mg/kg	4	NS	NS	0.19	U	NA		0.18	U	NA	
	Pyridine	mg/kg	500	NS	NS	0.21	U	NA		0.19	U	NA	
	Total SVOCs	mg/kg	NS	100	100	12.6		NA		3.02		NA	
PCBs													
	Aroclor 1016	mg/kg	1	NS	NS	0.0368	U	NA		0.0349	U	NA	
	Aroclor 1221	mg/kg	1	NS	NS	0.0368	U	NA		0.0349	U	NA	
	Aroclor 1232	mg/kg	1	NS	NS	0.0368	U	NA		0.0349	U	NA	
	Aroclor 1242	mg/kg	1	NS	NS	0.0368	U	NA		0.0349	U	NA	
	Aroclor 1248	mg/kg	1	NS	NS	0.0368	U	NA		0.0349	U	NA	
	Aroclor 1254	mg/kg	1	NS	NS	0.097		NA		0.134		NA	
	Aroclor 1260	mg/kg	1	NS	NS	0.0368	U	NA		0.0349	U	NA	
	Aroclor 1262	mg/kg	1	NS	NS	0.0368	U	NA		0.0349	U	NA	
	Aroclor 1268	mg/kg	1	NS	NS	0.0368	U	NA		0.0349	U	NA	
	PCBs, Total	mg/kg	1	2	2	0.097		NA		0.134		NA	
Pesticides													
	Delta-BHC	mg/kg	10	NS	NS	0.00181	U	NA		0.00167	U	NA	
	Lindane	mg/kg	0.003	NS	NS	0.000603	U	NA		0.000558	U	NA	
	Alpha-BHC	mg/kg	50	NS	NS	0.000754	U	NA		0.000698	U	NA	
	Beta-BHC	mg/kg	10	NS	NS	0.00181	U	NA		0.00167	U	NA	
	Heptachlor	mg/kg	0.3	NS	NS	0.000905	U	NA		0.000837	U	NA	
	Aldrin	mg/kg	0.08	NS	NS	0.00181	U	NA		0.00167	U	NA	
	Heptachlor epoxide	mg/kg	0.1	NS	NS	0.00356	P	NA		0.00314	U	NA	
	Endrin	mg/kg	10	NS	NS	0.000754	U	NA		0.000698	U	NA	
	Endrin ketone	mg/kg	NS	NS	NS	0.00181	U	NA		0.00167	U	NA	
	Dieldrin	mg/kg	0.08	NS	NS	0.00113	U	NA		0.00105	U	NA	
	4,4'-DDE	mg/kg	6	NS	NS	0.0023	P	NA		0.00167	U	NA	
	4,4'-DDD	mg/kg	8	NS	NS	0.00383	P	NA		0.00167	U	NA	
	4,4'-DDT	mg/kg	6	NS	NS	0.00729		NA		0.00314	U	NA	
	Endosulfan I	mg/kg	0.5	NS	NS	0.00181	U	NA		0.00167	U	NA	
	Endosulfan II	mg/kg	0.5	NS	NS	0.00181	U	NA		0.00167	U	NA	
	Endosulfan sulfate	mg/kg	NS	NS	NS	0.000754	U	NA		0.000698	U	NA	
	Methoxychlor	mg/kg	200	NS	NS	0.00339	U	NA		0.00314	U	NA	
	Chlordane	mg/kg	0.7	NS	NS	0.0151	U	NA		0.014	U	NA	
	Hexachlorobenzene	mg/kg	0.7	NS	NS	0.00181	U	NA		0.00167	U	NA	
Herbicides													
	MCP	mg/kg	NS	NS	NS	3.8	U	NA		3.5	U	NA	
	MCPA	mg/kg	100	NS	NS	3.8	U	NA		3.5	U	NA	
	Dalapon	mg/kg	1,000	NS	NS	0.038	U	NA		0.035	U	NA	
	Dicamba	mg/kg	500	NS	NS	0.038	U	NA		0.035	U	NA	
	Dichloroprop	mg/kg	NS	NS	NS	0.038	U	NA		0.035	U	NA	
	2,4-D	mg/kg	100	NS	NS	0.038	U	NA		0.035	U	NA	
	2,4-DB	mg/kg	100	NS	NS	0.038	U	NA		0.035	U	NA	
	2,4,5-T	mg/kg	100	NS	NS	0.038	U	NA		0.035	U	NA	
	2,4,5-TP (Silvex)	mg/kg	100	NS	NS	0.038	U	NA		0.035	U	NA	

Table 2 - Soil Characterization Analytical Results
Washington Street - RTN 3-34742
Somerville, Massachusetts

Sample Location: Sample Name: Lab Sample ID: Sample Date:						GLC-311B-21-DC				GLC-301B-07-DC			
						GLC-311B-21-DC-COMP		GLC-311B-21-DC-VOC-2		GLC-301B-07-DC-COMP		GLC-301B-07-DC-VOC-3	
						L2049316-03		L2049316-04		L2049316-05		L2049316-06	
						11/9/2020		11/9/2020		11/9/2020		11/9/2020	
Analysis	Analyte	Units	RCS-1	MA Unlined Landfill*	MA Lined Landfill*								
TPH													
	TPH (C10-C36)	mg/kg	1,000	2,500	5,000	72.4		NA		40.7		NA	
Metals, total													
	Antimony	mg/kg	20	NS	NS	2.29	U	NA		2.12	U	NA	
	Arsenic	mg/kg	20	40	40	9.19		NA		5.86		NA	
	Barium	mg/kg	1,000	NS	NS	46.7		NA		32.4		NA	
	Beryllium	mg/kg	90	NS	NS	0.229	U	NA		0.212	U	NA	
	Cadmium	mg/kg	70	30	80	0.457	U	NA		0.423	U	NA	
	Chromium	mg/kg	100	1,000	1,000	19.5		NA		16		NA	
	Lead	mg/kg	200	1,000	2,000	41.9		NA		23.5		NA	
	Mercury	mg/kg	20	10	10	0.103		NA		0.263		NA	
	Nickel	mg/kg	600	NS	NS	15.2		NA		13.4		NA	
	Selenium	mg/kg	400	NS	NS	3.25		NA		2.34		NA	
	Silver	mg/kg	100	NS	NS	0.457	U	NA		0.423	U	NA	
	Thallium	mg/kg	8	NS	NS	2.29	U	NA		2.12	U	NA	
	Vanadium	mg/kg	400	NS	NS	34.4		NA		29		NA	
	Zinc	mg/kg	1,000	NS	NS	70.8		NA		55.7		NA	
General Chemistry													
	Specific Conductance	umhos/cm	NS	4,000	8,000	82		NA		54		NA	
	pH	SU	NS	NS	NS	7.9		NA		8.1		NA	
	Cyanide, Reactive	mg/kg	NS	NS	NS	10	U	NA		10	U	NA	
	Sulfide, Reactive	mg/kg	NS	NS	NS	10	U	NA		10	U	NA	
	Ignitability		NS	NS	NS	NI		NA		NI		NA	

Notes:
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
su - Standard unit.
umhos/cm - Micro-mhos per centimeter.
I - The lower value for the two columns has been reported due to obvious interference.
ND - Not detected.
NI - Not ignitable.
NA - Sample not analyzed for the listed analyte.
NS - No MassDEP standards exist for this analyte.
P - The relative percent difference (RPD) between the results for the two columns exceeds the method-specified criteria.
U - Analyte was not detected at specified quantitation limit.
Values in **bold** indicate the analyte was detected.
VOCs - Volatile Organic Compounds.
SVOCs - Semivolatile Organic Compounds.
PCBs - Polychlorinated Biphenyls.
TPH - Total Petroleum Hydrocarbons.
RC - Reportable concentration.
(1) - MassDEP RC for C9-C10 aromatics used.
(2) - Criteria applicable to xylene (total), the sum of the xylene isomers.
(3) - MassDEP RC for Dichloropropane used.
(4) - MassDEP RC for Dichloropropene used.
(5) - MassDEP RC for Chlorotoluene used.
* - Reuse and Disposal of Contaminated Soil at Massachusetts Landfills, MassDEP Policy # COMM-97-001, August 1997.

Table 2 - Soil Characterization Analytical Results
Washington Street - RTN 3-34742
Somerville, Massachusetts

Sample Location: Sample Name: Lab Sample ID: Sample Date:						GLC-VMF(20)RCS-2-FILL-2-DC				GLC-VMF(20)-RCS-2-FILL-1-DC			
						GLC-VMF(20)RCS-2-FILL-2-DC-COMP		GLC-VMF(20)RCS-2-FILL-2-DC-VOC-4		GLC-VMF(20)-RCS-2-FILL-1-DC-COMP		GLC-VMF(20)-RCS-2-FILL-1-DC-VOC-6	
						L2050552-03		L2050552-04		L2051038-07		L2051038-08	
						11/13/2020		11/13/2020		11/17/2020		11/17/2020	
Analysis	Analyte	Units	RCS-1	MA Unlined Landfill*	MA Lined Landfill*								
VOCs													
	Methylene chloride	mg/kg	0.1	NS	NS	NA		0.0046	U	NA		0.0037	U
	1,1-Dichloroethane	mg/kg	0.4	NS	NS	NA		0.00093	U	NA		0.00074	U
	Chloroform	mg/kg	0.2	NS	NS	NA		0.0014	U	NA		0.0011	U
	Carbon tetrachloride	mg/kg	5	NS	NS	NA		0.00093	U	NA		0.00074	U
	1,2-Dichloropropane	mg/kg	0.1	NS	NS	NA		0.00093	U	NA		0.00074	U
	Dibromochloromethane	mg/kg	0.005	NS	NS	NA		0.00093	U	NA		0.00074	U
	1,1,2-Trichloroethane	mg/kg	0.1	NS	NS	NA		0.00093	U	NA		0.00074	U
	Tetrachloroethene	mg/kg	1	NS	NS	NA		0.00088		NA		0.00054	
	Chlorobenzene	mg/kg	1	NS	NS	NA		0.00046	U	NA		0.00037	U
	Trichlorofluoromethane	mg/kg	1,000	NS	NS	NA		0.0037	U	NA		0.003	U
	1,2-Dichloroethane	mg/kg	0.1	NS	NS	NA		0.00093	U	NA		0.00074	U
	1,1,1-Trichloroethane	mg/kg	30	NS	NS	NA		0.00046	U	NA		0.00037	U
	Bromodichloromethane	mg/kg	0.1	NS	NS	NA		0.00046	U	NA		0.00037	U
	trans-1,3-Dichloropropene	mg/kg	0.01	NS	NS	NA		0.00093	U	NA		0.00074	U
	cis-1,3-Dichloropropene	mg/kg	0.01	NS	NS	NA		0.00046	U	NA		0.00037	U
	1,3-Dichloropropene, Total	mg/kg	0.01	NS	NS	NA		0.00046	U	NA		0.00037	U
	1,1-Dichloropropene	mg/kg	0.01(4)	NS	NS	NA		0.00046	U	NA		0.00037	U
	Bromoform	mg/kg	0.1	NS	NS	NA		0.0037	U	NA		0.003	U
	1,1,2,2-Tetrachloroethane	mg/kg	0.005	NS	NS	NA		0.00046	U	NA		0.00037	U
	Benzene	mg/kg	2	NS	NS	NA		0.00046	U	NA		0.00037	U
	Toluene	mg/kg	30	NS	NS	NA		0.00093	U	NA		0.0042	
	Ethylbenzene	mg/kg	40	NS	NS	NA		0.00093	U	NA		0.002	
	Chloromethane	mg/kg	100	NS	NS	NA		0.0037	U	NA		0.003	U
	Bromomethane	mg/kg	0.5	NS	NS	NA		0.0018	U	NA		0.0015	U
	Vinyl chloride	mg/kg	0.7	NS	NS	NA		0.00093	U	NA		0.00074	U
	Chloroethane	mg/kg	100	NS	NS	NA		0.0018	U	NA		0.0015	U
	1,1-Dichloroethene	mg/kg	3	NS	NS	NA		0.00093	U	NA		0.00074	U
	trans-1,2-Dichloroethene	mg/kg	1	NS	NS	NA		0.0014	U	NA		0.0011	U
	Trichloroethene	mg/kg	0.3	NS	NS	NA		0.00046	U	NA		0.00037	U
	1,2-Dichlorobenzene	mg/kg	9	NS	NS	NA		0.0018	U	NA		0.0015	U
	1,3-Dichlorobenzene	mg/kg	3	NS	NS	NA		0.0018	U	NA		0.0015	U
	1,4-Dichlorobenzene	mg/kg	0.7	NS	NS	NA		0.0018	U	NA		0.0015	U
	Methyl tert butyl ether	mg/kg	0.1	NS	NS	NA		0.0018	U	NA		0.0015	U
	p/m-Xylene	mg/kg	100(2)	NS	NS	NA		0.0018	U	NA		0.0024	
	o-Xylene	mg/kg	100(2)	NS	NS	NA		0.00093	U	NA		0.0065	
	Xylenes, Total	mg/kg	100	NS	NS	NA		0.00093	U	NA		0.0089	
	cis-1,2-Dichloroethene	mg/kg	0.1	NS	NS	NA		0.00093	U	NA		0.00074	U
	1,2-Dichloroethene, Total	mg/kg	0.3	NS	NS	NA		0.00093	U	NA		0.00074	U
	Dibromomethane	mg/kg	500	NS	NS	NA		0.0018	U	NA		0.0015	U
	1,2,3-Trichloropropane	mg/kg	100	NS	NS	NA		0.0018	U	NA		0.0015	U
	Styrene	mg/kg	3	NS	NS	NA		0.00093	U	NA		0.00074	U
	Dichlorodifluoromethane	mg/kg	1,000	NS	NS	NA		0.0093	U	NA		0.0074	U
	Acetone	mg/kg	6	NS	NS	NA		0.023	U	NA		0.018	U
	Carbon disulfide	mg/kg	100	NS	NS	NA		0.0093	U	NA		0.0074	U
	Methyl ethyl ketone	mg/kg	4	NS	NS	NA		0.0093	U	NA		0.0074	U
	Methyl isobutyl ketone	mg/kg	0.4	NS	NS	NA		0.0093	U	NA		0.0074	U
	2-Hexanone	mg/kg	100	NS	NS	NA		0.0093	U	NA		0.0074	U
	Bromochloromethane	mg/kg	NS	NS	NS	NA		0.0018	U	NA		0.0015	U
	Tetrahydrofuran	mg/kg	500	NS	NS	NA		0.0037	U	NA		0.003	U
	2,2-Dichloropropane	mg/kg	0.1(3)	NS	NS	NA		0.0018	U	NA		0.0015	U
	1,2-Dibromoethane	mg/kg	0.1	NS	NS	NA		0.00093	U	NA		0.00074	U
	1,3-Dichloropropane	mg/kg	500	NS	NS	NA		0.0018	U	NA		0.0015	U
	1,1,1,2-Tetrachloroethane	mg/kg	0.1	NS	NS	NA		0.00046	U	NA		0.00037	U
	Bromobenzene	mg/kg	100	NS	NS	NA		0.0018	U	NA		0.0015	U
	n-Butylbenzene	mg/kg	100(1)	NS	NS	NA		0.00093	U	NA		0.00074	U
	sec-Butylbenzene	mg/kg	100(1)	NS	NS	NA		0.00093	U	NA		0.00074	U
	tert-Butylbenzene	mg/kg	100	NS	NS	NA		0.0018	U	NA		0.0015	U
	o-Chlorotoluene	mg/kg	100	NS	NS	NA		0.0018	U	NA		0.0015	U
	p-Chlorotoluene	mg/kg	100(5)	NS	NS	NA		0.0018	U	NA		0.0015	U

Table 2 - Soil Characterization Analytical Results
Washington Street - RTN 3-34742
Somerville, Massachusetts

Sample Location: Sample Name: Lab Sample ID: Sample Date:						GLC-VMF(20)RCS-2-FILL-2-DC				GLC-VMF(20)-RCS-2-FILL-1-DC			
						GLC-VMF(20)RCS-2-FILL-2-DC-COMP		GLC-VMF(20)RCS-2-FILL-2-DC-VOC-4		GLC-VMF(20)-RCS-2-FILL-1-DC-COMP		GLC-VMF(20)-RCS-2-FILL-1-DC-VOC-6	
						L2050552-03		L2050552-04		L2051038-07		L2051038-08	
						11/13/2020		11/13/2020		11/17/2020		11/17/2020	
Analysis	Analyte	Units	RCS-1	MA Unlined Landfill*	MA Lined Landfill*								
	1,2-Dibromo-3-chloropropane	mg/kg	10	NS	NS	NA		0.0028	U	NA		0.0022	U
	Hexachlorobutadiene	mg/kg	30	NS	NS	NA		0.0037	U	NA		0.003	U
	Isopropylbenzene	mg/kg	1,000	NS	NS	NA		0.00093	U	NA		0.00074	U
	p-Isopropyltoluene	mg/kg	100	NS	NS	NA		0.00093	U	NA		0.00074	U
	Naphthalene	mg/kg	4	NS	NS	NA		0.0037	U	NA		0.003	U
	n-Propylbenzene	mg/kg	100	NS	NS	NA		0.00093	U	NA		0.00074	U
	1,2,3-Trichlorobenzene	mg/kg	NS	NS	NS	NA		0.0018	U	NA		0.0015	U
	1,2,4-Trichlorobenzene	mg/kg	2	NS	NS	NA		0.0018	U	NA		0.0015	U
	1,3,5-Trimethylbenzene	mg/kg	10	NS	NS	NA		0.0018	U	NA		0.0027	
	1,2,4-Trimethylbenzene	mg/kg	1,000	NS	NS	NA		0.0018	U	NA		0.0015	U
	Diethyl ether	mg/kg	100	NS	NS	NA		0.0018	U	NA		0.0015	U
	Diisopropyl Ether	mg/kg	100	NS	NS	NA		0.0018	U	NA		0.0015	U
	Ethyl-Tert-Butyl-Ether	mg/kg	NS	NS	NS	NA		0.0018	U	NA		0.0015	U
	Tertiary-Amyl Methyl Ether	mg/kg	NS	NS	NS	NA		0.0018	U	NA		0.0015	U
	1,4-Dioxane	mg/kg	0.2	NS	NS	NA		0.074	U	NA		0.059	U
	Total VOCs	mg/kg	NS	4	10	NA		0.00088		NA		0.01834	
SVOCs													
	Acenaphthene	mg/kg	4	NS	NS	0.15	U	NA		0.14	U	NA	
	1,2,4-Trichlorobenzene	mg/kg	2	NS	NS	0.18	U	NA		0.17	U	NA	
	Hexachlorobenzene	mg/kg	0.7	NS	NS	0.077	U	NA		0.073	U	NA	
	Bis(2-chloroethyl)ether	mg/kg	0.7	NS	NS	0.077	U	NA		0.073	U	NA	
	2-Chloronaphthalene	mg/kg	1,000	NS	NS	0.18	U	NA		0.17	U	NA	
	1,2-Dichlorobenzene	mg/kg	9	NS	NS	0.18	U	NA		0.17	U	NA	
	1,3-Dichlorobenzene	mg/kg	3	NS	NS	0.18	U	NA		0.17	U	NA	
	1,4-Dichlorobenzene	mg/kg	0.7	NS	NS	0.077	U	NA		0.073	U	NA	
	3,3'-Dichlorobenzidine	mg/kg	3	NS	NS	0.18	U	NA		0.17	U	NA	
	2,4-Dinitrotoluene	mg/kg	0.7	NS	NS	0.077	U	NA		0.073	U	NA	
	2,6-Dinitrotoluene	mg/kg	100	NS	NS	0.18	U	NA		0.17	U	NA	
	Azobenzene	mg/kg	50	NS	NS	0.18	U	NA		0.17	U	NA	
	Fluoranthene	mg/kg	1,000	NS	NS	0.74		NA		0.97		NA	
	4-Bromophenyl phenyl ether	mg/kg	100	NS	NS	0.18	U	NA		0.17	U	NA	
	Bis(2-chloroisopropyl)ether	mg/kg	0.7	NS	NS	0.077	U	NA		0.073	U	NA	
	Bis(2-chloroethoxy)methane	mg/kg	500	NS	NS	0.2	U	NA		0.19	U	NA	
	Hexachlorobutadiene	mg/kg	30	NS	NS	0.18	U	NA		0.17	U	NA	
	Hexachloroethane	mg/kg	0.7	NS	NS	0.077	U	NA		0.073	U	NA	
	Isophorone	mg/kg	100	NS	NS	0.16	U	NA		0.16	U	NA	
	Naphthalene	mg/kg	4	NS	NS	0.18	U	NA		0.17	U	NA	
	Nitrobenzene	mg/kg	500	NS	NS	0.16	U	NA		0.16	U	NA	
	Bis(2-ethylhexyl)phthalate	mg/kg	90	NS	NS	0.18	U	NA		0.17	U	NA	
	Butyl benzyl phthalate	mg/kg	100	NS	NS	0.18	U	NA		0.17	U	NA	
	Di-n-butylphthalate	mg/kg	50	NS	NS	0.18	U	NA		0.17	U	NA	
	Di-n-octylphthalate	mg/kg	1,000	NS	NS	0.18	U	NA		0.17	U	NA	
	Diethyl phthalate	mg/kg	10	NS	NS	0.18	U	NA		0.17	U	NA	
	Dimethyl phthalate	mg/kg	0.7	NS	NS	0.077	U	NA		0.073	U	NA	
	Benzo(a)anthracene	mg/kg	7	NS	NS	0.36		NA		0.48		NA	
	Benzo(a)pyrene	mg/kg	2	NS	NS	0.4		NA		0.54		NA	
	Benzo(b)fluoranthene	mg/kg	7	NS	NS	0.47		NA		0.68		NA	
	Benzo(k)fluoranthene	mg/kg	70	NS	NS	0.17		NA		0.25		NA	
	Chrysene	mg/kg	70	NS	NS	0.36		NA		0.5		NA	
	Acenaphthylene	mg/kg	1	NS	NS	0.15	U	NA		0.14	U	NA	
	Anthracene	mg/kg	1,000	NS	NS	0.12		NA		0.19		NA	
	Benzo(ghi)perylene	mg/kg	1,000	NS	NS	0.21		NA		0.31		NA	
	Fluorene	mg/kg	1,000	NS	NS	0.18	U	NA		0.17	U	NA	
	Phenanthrene	mg/kg	10	NS	NS	0.51		NA		0.6		NA	
	Dibenzo(a,h)anthracene	mg/kg	0.7	NS	NS	0.077	U	NA		0.082		NA	
	Indeno(1,2,3-cd)pyrene	mg/kg	7	NS	NS	0.23		NA		0.35		NA	
	Pyrene	mg/kg	1,000	NS	NS	0.61		NA		0.84		NA	
	Aniline	mg/kg	1,000	NS	NS	0.22	U	NA		0.21	U	NA	
	4-Chloroaniline	mg/kg	1	NS	NS	0.18	U	NA		0.17	U	NA	
	Dibenzofuran	mg/kg	100	NS	NS	0.18	U	NA		0.17	U	NA	
	2-Methylnaphthalene	mg/kg	0.7	NS	NS	0.077	U	NA		0.12		NA	

Table 2 - Soil Characterization Analytical Results
Washington Street - RTN 3-34742
Somerville, Massachusetts

Sample Location: Sample Name: Lab Sample ID: Sample Date:						GLC-VMF(20)RCS-2-FILL-2-DC				GLC-VMF(20)-RCS-2-FILL-1-DC			
						GLC-VMF(20)RCS-2-FILL-2-DC-COMP		GLC-VMF(20)RCS-2-FILL-2-DC-VOC-4		GLC-VMF(20)-RCS-2-FILL-1-DC-COMP		GLC-VMF(20)-RCS-2-FILL-1-DC-VOC-6	
						L2050552-03		L2050552-04		L2051038-07		L2051038-08	
						11/13/2020		11/13/2020		11/17/2020		11/17/2020	
Analysis	Analyte	Units	RCS-1	MA Unlined Landfill*	MA Lined Landfill*								
	Acetophenone	mg/kg	1,000	NS	NS	0.18	U	NA		0.17	U	NA	
	2,4,6-Trichlorophenol	mg/kg	0.7	NS	NS	0.077	U	NA		0.073	U	NA	
	2-Chlorophenol	mg/kg	0.7	NS	NS	0.077	U	NA		0.073	U	NA	
	2,4-Dichlorophenol	mg/kg	0.7	NS	NS	0.077	U	NA		0.073	U	NA	
	2,4-Dimethylphenol	mg/kg	0.7	NS	NS	0.077	U	NA		0.073	U	NA	
	2-Nitrophenol	mg/kg	100	NS	NS	0.4	U	NA		0.38	U	NA	
	4-Nitrophenol	mg/kg	100	NS	NS	0.26	U	NA		0.24	U	NA	
	2,4-Dinitrophenol	mg/kg	3	NS	NS	0.88	U	NA		0.84	U	NA	
	Pentachlorophenol	mg/kg	3	NS	NS	0.37	U	NA		0.35	U	NA	
	Phenol	mg/kg	1	NS	NS	0.18	U	NA		0.17	U	NA	
	2-Methylphenol	mg/kg	500	NS	NS	0.18	U	NA		0.17	U	NA	
	3-Methylphenol/4-Methylphenol	mg/kg	500	NS	NS	0.26	U	NA		0.25	U	NA	
	2,4,5-Trichlorophenol	mg/kg	4	NS	NS	0.18	U	NA		0.17	U	NA	
	Pyridine	mg/kg	500	NS	NS	0.2	U	NA		0.19	U	NA	
	Total SVOCs	mg/kg	NS	100	100	4.18		NA		5.912		NA	
PCBs													
	Aroclor 1016	mg/kg	1	NS	NS	0.0361	U	NA		0.0338	U	NA	
	Aroclor 1221	mg/kg	1	NS	NS	0.0361	U	NA		0.0338	U	NA	
	Aroclor 1232	mg/kg	1	NS	NS	0.0361	U	NA		0.0338	U	NA	
	Aroclor 1242	mg/kg	1	NS	NS	0.0361	U	NA		0.0338	U	NA	
	Aroclor 1248	mg/kg	1	NS	NS	0.0361	U	NA		0.0338	U	NA	
	Aroclor 1254	mg/kg	1	NS	NS	0.137		NA		0.228		NA	
	Aroclor 1260	mg/kg	1	NS	NS	0.0361	U	NA		0.0338	U	NA	
	Aroclor 1262	mg/kg	1	NS	NS	0.0361	U	NA		0.0338	U	NA	
	Aroclor 1268	mg/kg	1	NS	NS	0.0361	U	NA		0.0338	U	NA	
	PCBs, Total	mg/kg	1	2	2	0.137		NA		0.228		NA	
Pesticides													
	Delta-BHC	mg/kg	10	NS	NS	0.00177	U	NA		0.00163	U	NA	
	Lindane	mg/kg	0.003	NS	NS	0.00059	U	NA		0.000544	U	NA	
	Alpha-BHC	mg/kg	50	NS	NS	0.000737	U	NA		0.00068	U	NA	
	Beta-BHC	mg/kg	10	NS	NS	0.00177	U	NA		0.00163	U	NA	
	Heptachlor	mg/kg	0.3	NS	NS	0.000885	U	NA		0.000815	U	NA	
	Aldrin	mg/kg	0.08	NS	NS	0.00177	U	NA		0.00163	U	NA	
	Heptachlor epoxide	mg/kg	0.1	NS	NS	0.014	P	NA		0.00306	U	NA	
	Endrin	mg/kg	10	NS	NS	0.000737	U	NA		0.00068	U	NA	
	Endrin ketone	mg/kg	NS	NS	NS	0.00177	U	NA		0.00163	U	NA	
	Dieldrin	mg/kg	0.08	NS	NS	0.00111	U	NA		0.00102	U	NA	
	4,4'-DDE	mg/kg	6	NS	NS	0.00177	U	NA		0.00163	U	NA	
	4,4'-DDD	mg/kg	8	NS	NS	0.00454		NA		0.00353		NA	
	4,4'-DDT	mg/kg	6	NS	NS	0.00598	IP	NA		0.00306	U	NA	
	Endosulfan I	mg/kg	0.5	NS	NS	0.00177	U	NA		0.00163	U	NA	
	Endosulfan II	mg/kg	0.5	NS	NS	0.00177	U	NA		0.00163	U	NA	
	Endosulfan sulfate	mg/kg	NS	NS	NS	0.000737	U	NA		0.00068	U	NA	
	Methoxychlor	mg/kg	200	NS	NS	0.00332	U	NA		0.00306	U	NA	
	Chlordane	mg/kg	0.7	NS	NS	0.0147	U	NA		0.0136	U	NA	
	Hexachlorobenzene	mg/kg	0.7	NS	NS	0.00177	U	NA		0.00163	U	NA	
Herbicides													
	MCP	mg/kg	NS	NS	NS	3.7	U	NA		3.5	U	NA	
	MCPA	mg/kg	100	NS	NS	3.7	U	NA		3.5	U	NA	
	Dalapon	mg/kg	1,000	NS	NS	0.037	U	NA		0.035	U	NA	
	Dicamba	mg/kg	500	NS	NS	0.037	U	NA		0.035	U	NA	
	Dichloroprop	mg/kg	NS	NS	NS	0.037	U	NA		0.035	U	NA	
	2,4-D	mg/kg	100	NS	NS	0.037	U	NA		0.035	U	NA	
	2,4-DB	mg/kg	100	NS	NS	0.037	U	NA		0.035	U	NA	
	2,4,5-T	mg/kg	100	NS	NS	0.037	U	NA		0.035	U	NA	
	2,4,5-TP (Silvex)	mg/kg	100	NS	NS	0.037	U	NA		0.035	U	NA	

Table 2 - Soil Characterization Analytical Results
Washington Street - RTN 3-34742
Somerville, Massachusetts

Sample Location: Sample Name: Lab Sample ID: Sample Date:						GLC-VMF(20)RCS-2-FILL-2-DC				GLC-VMF(20)-RCS-2-FILL-1-DC			
						GLC-VMF(20)RCS-2-FILL-2-DC-COMP		GLC-VMF(20)RCS-2-FILL-2-DC-VOC-4		GLC-VMF(20)-RCS-2-FILL-1-DC-COMP		GLC-VMF(20)-RCS-2-FILL-1-DC-VOC-6	
						L2050552-03		L2050552-04		L2051038-07		L2051038-08	
						11/13/2020		11/13/2020		11/17/2020		11/17/2020	
Analysis	Analyte	Units	RCS-1	MA Unlined Landfill*	MA Lined Landfill*								
TPH													
	TPH (C10-C36)	mg/kg	1,000	2,500	5,000	78.4		NA		84.2		NA	
Metals, total													
	Antimony	mg/kg	20	NS	NS	2.23	U	NA		2.11	U	NA	
	Arsenic	mg/kg	20	40	40	6.64		NA		8.29		NA	
	Barium	mg/kg	1,000	NS	NS	39.4		NA		35		NA	
	Beryllium	mg/kg	90	NS	NS	0.223	U	NA		0.211	U	NA	
	Cadmium	mg/kg	70	30	80	0.696		NA		0.532		NA	
	Chromium	mg/kg	100	1,000	1,000	16.3		NA		17.8		NA	
	Lead	mg/kg	200	1,000	2,000	32.4		NA		31.9		NA	
	Mercury	mg/kg	20	10	10	0.162		NA		0.091		NA	
	Nickel	mg/kg	600	NS	NS	14.4		NA		13.7		NA	
	Selenium	mg/kg	400	NS	NS	2.23	U	NA		2.11	U	NA	
	Silver	mg/kg	100	NS	NS	0.446	U	NA		0.422	U	NA	
	Thallium	mg/kg	8	NS	NS	2.23	U	NA		2.11	U	NA	
	Vanadium	mg/kg	400	NS	NS	35.4		NA		29.1		NA	
	Zinc	mg/kg	1,000	NS	NS	66.4		NA		65.7		NA	
General Chemistry													
	Specific Conductance	umhos/cm	NS	4,000	8,000	94		NA		89		NA	
	pH	SU	NS	NS	NS	8		NA		8.2		NA	
	Cyanide, Reactive	mg/kg	NS	NS	NS	10	U	NA		10	U	NA	
	Sulfide, Reactive	mg/kg	NS	NS	NS	10	U	NA		10	U	NA	
	Ignitability		NS	NS	NS	NI		NA		NI		NA	

Notes:
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
su - Standard unit.
umhos/cm - Micro-mhos per centimeter.
I - The lower value for the two columns has been reported due to obvious interference.
ND - Not detected.
NI - Not ignitable.
NA - Sample not analyzed for the listed analyte.
NS - No MassDEP standards exist for this analyte.
P - The relative percent difference (RPD) between the results for the two columns exceeds the method-specified criteria.
U - Analyte was not detected at specified quantitation limit.
Values in **bold** indicate the analyte was detected.
VOCs - Volatile Organic Compounds.
SVOCs - Semivolatile Organic Compounds.
PCBs - Polychlorinated Biphenyls.
TPH - Total Petroleum Hydrocarbons.
RC - Reportable concentration.
(1) - MassDEP RC for C9-C10 aromatics used.
(2) - Criteria applicable to xylene (total), the sum of the xylene isomers.
(3) - MassDEP RC for Dichloropropane used.
(4) - MassDEP RC for Dichloropropene used.
(5) - MassDEP RC for Chlorotoluene used.
* - Reuse and Disposal of Contaminated Soil at Massachusetts Landfills, MassDEP Policy # COMM-97-001, August 1997.

Table 2 - Soil Characterization Analytical Results
Washington Street - RTN 3-34742
Somerville, Massachusetts

Sample Location: Sample Name: Lab Sample ID: Sample Date:						GLC-VMF(20)-RCS-2-FILL-10-DC				GLC-VMF(20)-RCS-2-FILL(7)-DC			
						GLC-VMF(20)-RCS-2-FILL-10-DC-COMP		GLC-VMF(20)-RCS-2-FILL-10-DC-VOC-2		GLC-VMF(20)-RCS-2-FILL(7)-DC-COMP		GLC-VMF(20)-RCS-2-FILL(7)-DC-VOC(1)	
						L2051038-09		L2051038-10		L2052968-01		L2052968-02	
						11/17/2020		11/17/2020		11/30/2020		11/30/2020	
Analysis	Analyte	Units	RCS-1	MA Unlined Landfill*	MA Lined Landfill*								
VOCs													
	Methylene chloride	mg/kg	0.1	NS	NS	NA		0.0035	U	NA		0.0025	U
	1,1-Dichloroethane	mg/kg	0.4	NS	NS	NA		0.00069	U	NA		0.00051	U
	Chloroform	mg/kg	0.2	NS	NS	NA		0.001	U	NA		0.00076	U
	Carbon tetrachloride	mg/kg	5	NS	NS	NA		0.00069	U	NA		0.00051	U
	1,2-Dichloropropane	mg/kg	0.1	NS	NS	NA		0.00069	U	NA		0.00051	U
	Dibromochloromethane	mg/kg	0.005	NS	NS	NA		0.00069	U	NA		0.00051	U
	1,1,2-Trichloroethane	mg/kg	0.1	NS	NS	NA		0.00069	U	NA		0.00051	U
	Tetrachloroethene	mg/kg	1	NS	NS	NA		0.00035		NA		0.00026	
	Chlorobenzene	mg/kg	1	NS	NS	NA		0.00035	U	NA		0.00025	U
	Trichlorofluoromethane	mg/kg	1,000	NS	NS	NA		0.0028	U	NA		0.002	U
	1,2-Dichloroethane	mg/kg	0.1	NS	NS	NA		0.00069	U	NA		0.00051	U
	1,1,1-Trichloroethane	mg/kg	30	NS	NS	NA		0.00035	U	NA		0.00025	U
	Bromodichloromethane	mg/kg	0.1	NS	NS	NA		0.00035	U	NA		0.00025	U
	trans-1,3-Dichloropropene	mg/kg	0.01	NS	NS	NA		0.00069	U	NA		0.00051	U
	cis-1,3-Dichloropropene	mg/kg	0.01	NS	NS	NA		0.00035	U	NA		0.00025	U
	1,3-Dichloropropene, Total	mg/kg	0.01	NS	NS	NA		0.00035	U	NA		0.00025	U
	1,1-Dichloropropene	mg/kg	0.01(4)	NS	NS	NA		0.00035	U	NA		0.00025	U
	Bromoform	mg/kg	0.1	NS	NS	NA		0.0028	U	NA		0.002	U
	1,1,2,2-Tetrachloroethane	mg/kg	0.005	NS	NS	NA		0.00035	U	NA		0.00025	U
	Benzene	mg/kg	2	NS	NS	NA		0.00035	U	NA		0.00025	U
	Toluene	mg/kg	30	NS	NS	NA		0.00069	U	NA		0.00051	U
	Ethylbenzene	mg/kg	40	NS	NS	NA		0.00069	U	NA		0.00051	U
	Chloromethane	mg/kg	100	NS	NS	NA		0.0028	U	NA		0.002	U
	Bromomethane	mg/kg	0.5	NS	NS	NA		0.0014	U	NA		0.001	U
	Vinyl chloride	mg/kg	0.7	NS	NS	NA		0.00069	U	NA		0.00051	U
	Chloroethane	mg/kg	100	NS	NS	NA		0.0014	U	NA		0.001	U
	1,1-Dichloroethene	mg/kg	3	NS	NS	NA		0.00069	U	NA		0.00051	U
	trans-1,2-Dichloroethene	mg/kg	1	NS	NS	NA		0.001	U	NA		0.00076	U
	Trichloroethene	mg/kg	0.3	NS	NS	NA		0.00035	U	NA		0.00025	U
	1,2-Dichlorobenzene	mg/kg	9	NS	NS	NA		0.0014	U	NA		0.001	U
	1,3-Dichlorobenzene	mg/kg	3	NS	NS	NA		0.0014	U	NA		0.001	U
	1,4-Dichlorobenzene	mg/kg	0.7	NS	NS	NA		0.0014	U	NA		0.001	U
	Methyl tert butyl ether	mg/kg	0.1	NS	NS	NA		0.0014	U	NA		0.001	U
	p/m-Xylene	mg/kg	100(2)	NS	NS	NA		0.0014	U	NA		0.001	U
	o-Xylene	mg/kg	100(2)	NS	NS	NA		0.00069	U	NA		0.00051	U
	Xylenes, Total	mg/kg	100	NS	NS	NA		0.00069	U	NA		0.00051	U
	cis-1,2-Dichloroethene	mg/kg	0.1	NS	NS	NA		0.00069	U	NA		0.00051	U
	1,2-Dichloroethene, Total	mg/kg	0.3	NS	NS	NA		0.00069	U	NA		0.00051	U
	Dibromomethane	mg/kg	500	NS	NS	NA		0.0014	U	NA		0.001	U
	1,2,3-Trichloropropane	mg/kg	100	NS	NS	NA		0.0014	U	NA		0.001	U
	Styrene	mg/kg	3	NS	NS	NA		0.00069	U	NA		0.00051	U
	Dichlorodifluoromethane	mg/kg	1,000	NS	NS	NA		0.0069	U	NA		0.0051	U
	Acetone	mg/kg	6	NS	NS	NA		0.017	U	NA		0.013	
	Carbon disulfide	mg/kg	100	NS	NS	NA		0.0069	U	NA		0.0051	U
	Methyl ethyl ketone	mg/kg	4	NS	NS	NA		0.0069	U	NA		0.0051	U
	Methyl isobutyl ketone	mg/kg	0.4	NS	NS	NA		0.0069	U	NA		0.0051	U
	2-Hexanone	mg/kg	100	NS	NS	NA		0.0069	U	NA		0.0051	U
	Bromochloromethane	mg/kg	NS	NS	NS	NA		0.0014	U	NA		0.001	U
	Tetrahydrofuran	mg/kg	500	NS	NS	NA		0.0028	U	NA		0.002	U
	2,2-Dichloropropane	mg/kg	0.1(3)	NS	NS	NA		0.0014	U	NA		0.001	U
	1,2-Dibromoethane	mg/kg	0.1	NS	NS	NA		0.00069	U	NA		0.00051	U
	1,3-Dichloropropane	mg/kg	500	NS	NS	NA		0.0014	U	NA		0.001	U
	1,1,1,2-Tetrachloroethane	mg/kg	0.1	NS	NS	NA		0.00035	U	NA		0.00025	U
	Bromobenzene	mg/kg	100	NS	NS	NA		0.0014	U	NA		0.001	U
	n-Butylbenzene	mg/kg	100(1)	NS	NS	NA		0.00069	U	NA		0.00051	U
	sec-Butylbenzene	mg/kg	100(1)	NS	NS	NA		0.00069	U	NA		0.00051	U
	tert-Butylbenzene	mg/kg	100	NS	NS	NA		0.0014	U	NA		0.001	U
	o-Chlorotoluene	mg/kg	100	NS	NS	NA		0.0014	U	NA		0.001	U
	p-Chlorotoluene	mg/kg	100(5)	NS	NS	NA		0.0014	U	NA		0.001	U

Table 2 - Soil Characterization Analytical Results
Washington Street - RTN 3-34742
Somerville, Massachusetts

Sample Location: Sample Name: Lab Sample ID: Sample Date:						GLC-VMF(20)-RCS-2-FILL-10-DC				GLC-VMF(20)-RCS-2-FILL(7)-DC			
						GLC-VMF(20)-RCS-2-FILL-10-DC-COMP		GLC-VMF(20)-RCS-2-FILL-10-DC-VOC-2		GLC-VMF(20)-RCS-2-FILL(7)-DC-COMP		GLC-VMF(20)-RCS-2-FILL(7)-DC-VOC(1)	
						L2051038-09		L2051038-10		L2052968-01		L2052968-02	
						11/17/2020		11/17/2020		11/30/2020		11/30/2020	
Analysis	Analyte	Units	RCS-1	MA Unlined Landfill*	MA Lined Landfill*								
	1,2-Dibromo-3-chloropropane	mg/kg	10	NS	NS	NA		0.0021	U	NA		0.0015	U
	Hexachlorobutadiene	mg/kg	30	NS	NS	NA		0.0028	U	NA		0.002	U
	Isopropylbenzene	mg/kg	1,000	NS	NS	NA		0.00069	U	NA		0.00051	U
	p-Isopropyltoluene	mg/kg	100	NS	NS	NA		0.00069	U	NA		0.00051	U
	Naphthalene	mg/kg	4	NS	NS	NA		0.0028	U	NA		0.002	U
	n-Propylbenzene	mg/kg	100	NS	NS	NA		0.00069	U	NA		0.00051	U
	1,2,3-Trichlorobenzene	mg/kg	NS	NS	NS	NA		0.0014	U	NA		0.001	U
	1,2,4-Trichlorobenzene	mg/kg	2	NS	NS	NA		0.0014	U	NA		0.001	U
	1,3,5-Trimethylbenzene	mg/kg	10	NS	NS	NA		0.0014	U	NA		0.001	U
	1,2,4-Trimethylbenzene	mg/kg	1,000	NS	NS	NA		0.0014	U	NA		0.001	U
	Diethyl ether	mg/kg	100	NS	NS	NA		0.0014	U	NA		0.001	U
	Diisopropyl Ether	mg/kg	100	NS	NS	NA		0.0014	U	NA		0.001	U
	Ethyl-Tert-Butyl-Ether	mg/kg	NS	NS	NS	NA		0.0014	U	NA		0.001	U
	Tertiary-Amyl Methyl Ether	mg/kg	NS	NS	NS	NA		0.0014	U	NA		0.001	U
	1,4-Dioxane	mg/kg	0.2	NS	NS	NA		0.056	U	NA		0.041	U
	Total VOCs	mg/kg	NS	4	10	NA		0.00035		NA		0.01326	
SVOCs													
	Acenaphthene	mg/kg	4	NS	NS	0.14	U	NA		0.14	U	NA	
	1,2,4-Trichlorobenzene	mg/kg	2	NS	NS	0.18	U	NA		0.17	U	NA	
	Hexachlorobenzene	mg/kg	0.7	NS	NS	0.074	U	NA		0.073	U	NA	
	Bis(2-chloroethyl)ether	mg/kg	0.7	NS	NS	0.074	U	NA		0.073	U	NA	
	2-Chloronaphthalene	mg/kg	1,000	NS	NS	0.18	U	NA		0.17	U	NA	
	1,2-Dichlorobenzene	mg/kg	9	NS	NS	0.18	U	NA		0.17	U	NA	
	1,3-Dichlorobenzene	mg/kg	3	NS	NS	0.18	U	NA		0.17	U	NA	
	1,4-Dichlorobenzene	mg/kg	0.7	NS	NS	0.074	U	NA		0.073	U	NA	
	3,3'-Dichlorobenzidine	mg/kg	3	NS	NS	0.18	U	NA		0.17	U	NA	
	2,4-Dinitrotoluene	mg/kg	0.7	NS	NS	0.074	U	NA		0.073	U	NA	
	2,6-Dinitrotoluene	mg/kg	100	NS	NS	0.18	U	NA		0.17	U	NA	
	Azobenzene	mg/kg	50	NS	NS	0.18	U	NA		0.17	U	NA	
	Fluoranthene	mg/kg	1,000	NS	NS	0.23		NA		0.31		NA	
	4-Bromophenyl phenyl ether	mg/kg	100	NS	NS	0.18	U	NA		0.17	U	NA	
	Bis(2-chloroisopropyl)ether	mg/kg	0.7	NS	NS	0.074	U	NA		0.073	U	NA	
	Bis(2-chloroethoxy)methane	mg/kg	500	NS	NS	0.19	U	NA		0.19	U	NA	
	Hexachlorobutadiene	mg/kg	30	NS	NS	0.18	U	NA		0.17	U	NA	
	Hexachloroethane	mg/kg	0.7	NS	NS	0.074	U	NA		0.073	U	NA	
	Isophorone	mg/kg	100	NS	NS	0.16	U	NA		0.16	U	NA	
	Naphthalene	mg/kg	4	NS	NS	0.18	U	NA		0.17	U	NA	
	Nitrobenzene	mg/kg	500	NS	NS	0.16	U	NA		0.16	U	NA	
	Bis(2-ethylhexyl)phthalate	mg/kg	90	NS	NS	0.18	U	NA		0.17	U	NA	
	Butyl benzyl phthalate	mg/kg	100	NS	NS	0.18	U	NA		0.17	U	NA	
	Di-n-butylphthalate	mg/kg	50	NS	NS	0.18	U	NA		0.17	U	NA	
	Di-n-octylphthalate	mg/kg	1,000	NS	NS	0.18	U	NA		0.17	U	NA	
	Diethyl phthalate	mg/kg	10	NS	NS	0.18	U	NA		0.17	U	NA	
	Dimethyl phthalate	mg/kg	0.7	NS	NS	0.074	U	NA		0.073	U	NA	
	Benzo(a)anthracene	mg/kg	7	NS	NS	0.12		NA		0.16		NA	
	Benzo(a)pyrene	mg/kg	2	NS	NS	0.14		NA		0.17		NA	
	Benzo(b)fluoranthene	mg/kg	7	NS	NS	0.19		NA		0.2		NA	
	Benzo(k)fluoranthene	mg/kg	70	NS	NS	0.11	U	NA		0.1	U	NA	
	Chrysene	mg/kg	70	NS	NS	0.14		NA		0.16		NA	
	Acenaphthylene	mg/kg	1	NS	NS	0.14	U	NA		0.14	U	NA	
	Anthracene	mg/kg	1,000	NS	NS	0.11	U	NA		0.1	U	NA	
	Benzo(ghi)perylene	mg/kg	1,000	NS	NS	0.14	U	NA		0.14	U	NA	
	Fluorene	mg/kg	1,000	NS	NS	0.18	U	NA		0.17	U	NA	
	Phenanthrene	mg/kg	10	NS	NS	0.16		NA		0.2		NA	
	Dibenzo(a,h)anthracene	mg/kg	0.7	NS	NS	0.074	U	NA		0.073	U	NA	
	Indeno(1,2,3-cd)pyrene	mg/kg	7	NS	NS	0.14	U	NA		0.14	U	NA	
	Pyrene	mg/kg	1,000	NS	NS	0.2		NA		0.28		NA	
	Aniline	mg/kg	1,000	NS	NS	0.21	U	NA		0.21	U	NA	
	4-Chloroaniline	mg/kg	1	NS	NS	0.18	U	NA		0.17	U	NA	
	Dibenzofuran	mg/kg	100	NS	NS	0.18	U	NA		0.17	U	NA	
	2-Methylnaphthalene	mg/kg	0.7	NS	NS	0.083		NA		0.073	U	NA	

Table 2 - Soil Characterization Analytical Results
Washington Street - RTN 3-34742
Somerville, Massachusetts

Sample Location: Sample Name: Lab Sample ID: Sample Date:						GLC-VMF(20)-RCS-2-FILL-10-DC				GLC-VMF(20)-RCS-2-FILL(7)-DC			
						GLC-VMF(20)-RCS-2-FILL-10-DC-COMP		GLC-VMF(20)-RCS-2-FILL-10-DC-VOC-2		GLC-VMF(20)-RCS-2-FILL(7)-DC-COMP		GLC-VMF(20)-RCS-2-FILL(7)-DC-VOC(1)	
						L2051038-09		L2051038-10		L2052968-01		L2052968-02	
11/17/2020		11/17/2020		11/30/2020		11/30/2020							
Analysis	Analyte	Units	RCS-1	MA Unlined Landfill*	MA Lined Landfill*								
	Acetophenone	mg/kg	1,000	NS	NS	0.18	U	NA		0.17	U	NA	
	2,4,6-Trichlorophenol	mg/kg	0.7	NS	NS	0.074	U	NA		0.073	U	NA	
	2-Chlorophenol	mg/kg	0.7	NS	NS	0.074	U	NA		0.073	U	NA	
	2,4-Dichlorophenol	mg/kg	0.7	NS	NS	0.074	U	NA		0.073	U	NA	
	2,4-Dimethylphenol	mg/kg	0.7	NS	NS	0.074	U	NA		0.073	U	NA	
	2-Nitrophenol	mg/kg	100	NS	NS	0.38	U	NA		0.38	U	NA	
	4-Nitrophenol	mg/kg	100	NS	NS	0.25	U	NA		0.24	U	NA	
	2,4-Dinitrophenol	mg/kg	3	NS	NS	0.85	U	NA		0.84	U	NA	
	Pentachlorophenol	mg/kg	3	NS	NS	0.35	U	NA		0.35	U	NA	
	Phenol	mg/kg	1	NS	NS	0.18	U	NA		0.17	U	NA	
	2-Methylphenol	mg/kg	500	NS	NS	0.18	U	NA		0.17	U	NA	
	3-Methylphenol/4-Methylphenol	mg/kg	500	NS	NS	0.25	U	NA		0.25	U	NA	
	2,4,5-Trichlorophenol	mg/kg	4	NS	NS	0.18	U	NA		0.17	U	NA	
	Pyridine	mg/kg	500	NS	NS	0.19	U	NA		0.19	U	NA	
	Total SVOCs	mg/kg	NS	100	100	1.263		NA		1.48		NA	
PCBs													
	Aroclor 1016	mg/kg	1	NS	NS	0.0361	U	NA		0.0335	U	NA	
	Aroclor 1221	mg/kg	1	NS	NS	0.0361	U	NA		0.0335	U	NA	
	Aroclor 1232	mg/kg	1	NS	NS	0.0361	U	NA		0.0335	U	NA	
	Aroclor 1242	mg/kg	1	NS	NS	0.0361	U	NA		0.0335	U	NA	
	Aroclor 1248	mg/kg	1	NS	NS	0.0361	U	NA		0.0335	U	NA	
	Aroclor 1254	mg/kg	1	NS	NS	0.0826		NA		0.458		NA	
	Aroclor 1260	mg/kg	1	NS	NS	0.0361	U	NA		0.0335	U	NA	
	Aroclor 1262	mg/kg	1	NS	NS	0.0361	U	NA		0.0335	U	NA	
	Aroclor 1268	mg/kg	1	NS	NS	0.0361	U	NA		0.0335	U	NA	
	PCBs, Total	mg/kg	1	2	2	0.0826		NA		0.458		NA	
Pesticides													
	Delta-BHC	mg/kg	10	NS	NS	0.00169	U	NA		0.00167	U	NA	
	Lindane	mg/kg	0.003	NS	NS	0.000563	U	NA		0.000557	U	NA	
	Alpha-BHC	mg/kg	50	NS	NS	0.000704	U	NA		0.000696	U	NA	
	Beta-BHC	mg/kg	10	NS	NS	0.00169	U	NA		0.00167	U	NA	
	Heptachlor	mg/kg	0.3	NS	NS	0.000845	U	NA		0.000836	U	NA	
	Aldrin	mg/kg	0.08	NS	NS	0.00169	U	NA		0.00167	U	NA	
	Heptachlor epoxide	mg/kg	0.1	NS	NS	0.00317	U	NA		0.00313	U	NA	
	Endrin	mg/kg	10	NS	NS	0.000704	U	NA		0.000696	U	NA	
	Endrin ketone	mg/kg	NS	NS	NS	0.00169	U	NA		0.00167	U	NA	
	Dieldrin	mg/kg	0.08	NS	NS	0.00106	U	NA		0.00104	U	NA	
	4,4'-DDE	mg/kg	6	NS	NS	0.00169	U	NA		0.00167	U	NA	
	4,4'-DDD	mg/kg	8	NS	NS	0.00169	U	NA		0.00472		NA	
	4,4'-DDT	mg/kg	6	NS	NS	0.00317	U	NA		0.00876	IP	NA	
	Endosulfan I	mg/kg	0.5	NS	NS	0.00169	U	NA		0.00167	U	NA	
	Endosulfan II	mg/kg	0.5	NS	NS	0.00169	U	NA		0.00167	U	NA	
	Endosulfan sulfate	mg/kg	NS	NS	NS	0.000704	U	NA		0.000696	U	NA	
	Methoxychlor	mg/kg	200	NS	NS	0.00317	U	NA		0.00313	U	NA	
	Chlordane	mg/kg	0.7	NS	NS	0.0141	U	NA		0.0214	IP	NA	
	Hexachlorobenzene	mg/kg	0.7	NS	NS	0.00169	U	NA		0.00167	U	NA	
Herbicides													
	MCP	mg/kg	NS	NS	NS	3.6	U	NA		3.5	U	NA	
	MCPA	mg/kg	100	NS	NS	3.6	U	NA		3.5	U	NA	
	Dalapon	mg/kg	1,000	NS	NS	0.036	U	NA		0.035	U	NA	
	Dicamba	mg/kg	500	NS	NS	0.036	U	NA		0.035	U	NA	
	Dichloroprop	mg/kg	NS	NS	NS	0.036	U	NA		0.035	U	NA	
	2,4-D	mg/kg	100	NS	NS	0.036	U	NA		0.035	U	NA	
	2,4-DB	mg/kg	100	NS	NS	0.036	U	NA		0.035	U	NA	
	2,4,5-T	mg/kg	100	NS	NS	0.036	U	NA		0.035	U	NA	
	2,4,5-TP (Silvex)	mg/kg	100	NS	NS	0.036	U	NA		0.035	U	NA	

Table 2 - Soil Characterization Analytical Results
Washington Street - RTN 3-34742
Somerville, Massachusetts

Sample Location: Sample Name: Lab Sample ID: Sample Date:						GLC-VMF(20)-RCS-2-FILL-10-DC				GLC-VMF(20)-RCS-2-FILL(7)-DC			
						GLC-VMF(20)-RCS-2-FILL-10-DC-COMP		GLC-VMF(20)-RCS-2-FILL-10-DC-VOC-2		GLC-VMF(20)-RCS-2-FILL(7)-DC-COMP		GLC-VMF(20)-RCS-2-FILL(7)-DC-VOC(1)	
						L2051038-09		L2051038-10		L2052968-01		L2052968-02	
						11/17/2020		11/17/2020		11/30/2020		11/30/2020	
Analysis	Analyte	Units	RCS-1	MA Unlined Landfill*	MA Lined Landfill*								
TPH													
	TPH (C10-C36)	mg/kg	1,000	2,500	5,000	58		NA		76.1		NA	
Metals, total													
	Antimony	mg/kg	20	NS	NS	2.06	U	NA		2.03	U	NA	
	Arsenic	mg/kg	20	40	40	4.85		NA		6.3		NA	
	Barium	mg/kg	1,000	NS	NS	31.1		NA		45		NA	
	Beryllium	mg/kg	90	NS	NS	0.206	U	NA		0.211		NA	
	Cadmium	mg/kg	70	30	80	0.581		NA		0.564		NA	
	Chromium	mg/kg	100	1,000	1,000	26.8		NA		27.2		NA	
	Lead	mg/kg	200	1,000	2,000	13.4		NA		30.1		NA	
	Mercury	mg/kg	20	10	10	0.079	U	NA		0.085	U	NA	
	Nickel	mg/kg	600	NS	NS	17.8		NA		16.6		NA	
	Selenium	mg/kg	400	NS	NS	2.06	U	NA		2.03	U	NA	
	Silver	mg/kg	100	NS	NS	0.412	U	NA		0.406	U	NA	
	Thallium	mg/kg	8	NS	NS	2.06	U	NA		2.03	U	NA	
	Vanadium	mg/kg	400	NS	NS	41.8		NA		31.9		NA	
	Zinc	mg/kg	1,000	NS	NS	42.8		NA		51.7		NA	
General Chemistry													
	Specific Conductance	umhos/cm	NS	4,000	8,000	210		NA		110		NA	
	pH	SU	NS	NS	NS	8		NA		8.1		NA	
	Cyanide, Reactive	mg/kg	NS	NS	NS	10	U	NA		10	U	NA	
	Sulfide, Reactive	mg/kg	NS	NS	NS	10	U	NA		10	U	NA	
	Ignitability		NS	NS	NS	NI		NA		NI		NA	

Notes:

mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).

su - Standard unit.

umhos/cm - Micro-mhos per centimeter.

I - The lower value for the two columns has been reported due to obvious interference.

ND - Not detected.

NI - Not ignitable.

NA - Sample not analyzed for the listed analyte.

NS - No MassDEP standards exist for this analyte.

P - The relative percent difference (RPD) between the results for the two columns exceeds the method-specified criteria.

U - Analyte was not detected at specified quantitation limit.

Values in **bold** indicate the analyte was detected.

VOCs - Volatile Organic Compounds.

SVOCs - Semivolatile Organic Compounds.

PCBs - Polychlorinated Biphenyls.

TPH - Total Petroleum Hydrocarbons.

RC - Reportable concentration.

(1) - MassDEP RC for C9-C10 aromatics used.

(2) - Criteria applicable to xylene (total), the sum of the xylene isomers.

(3) - MassDEP RC for Dichloropropane used.

(4) - MassDEP RC for Dichloropropene used.

(5) - MassDEP RC for Chlorotoluene used.

* - Reuse and Disposal of Contaminated Soil at Massachusetts Landfills, MassDEP Policy # COMM-97-001, August 1997.

Table 2 - Soil Characterization Analytical Results
Washington Street - RTN 3-34742
Somerville, Massachusetts

Sample Location: Sample Name: Lab Sample ID: Sample Date:						GLC-VMF(20)-RCS-2-FILL(8)-DC				GLC-VMF(20)-RCS-2-FILL(14)-DC			
						GLC-VMF(20)-RCS-2-FILL(8)-DC-COMP		GLC-VMF(20)-RCS-2-FILL(8)-DC-VOC(1)		GLC-VMF(20)-RCS-2-FILL(14)-DC-COMP		GLC-VMF(20)-RCS-2-FILL(14)-DC-VOC-3	
						L2052968-03		L2052968-04		L2053491-01		L2053491-02	
						11/30/2020		11/30/2020		12/2/2020		12/2/2020	
Analysis	Analyte	Units	RCS-1	MA Unlined Landfill*	MA Lined Landfill*								
VOCs													
	Methylene chloride	mg/kg	0.1	NS	NS	NA		0.003	U	NA		0.0039	U
	1,1-Dichloroethane	mg/kg	0.4	NS	NS	NA		0.0006	U	NA		0.00078	U
	Chloroform	mg/kg	0.2	NS	NS	NA		0.0009	U	NA		0.0012	U
	Carbon tetrachloride	mg/kg	5	NS	NS	NA		0.0006	U	NA		0.00078	U
	1,2-Dichloropropane	mg/kg	0.1	NS	NS	NA		0.0006	U	NA		0.00078	U
	Dibromochloromethane	mg/kg	0.005	NS	NS	NA		0.0006	U	NA		0.00078	U
	1,1,2-Trichloroethane	mg/kg	0.1	NS	NS	NA		0.0006	U	NA		0.00078	U
	Tetrachloroethene	mg/kg	1	NS	NS	NA		0.0003	U	NA		0.00057	
	Chlorobenzene	mg/kg	1	NS	NS	NA		0.0003	U	NA		0.00039	U
	Trichlorofluoromethane	mg/kg	1,000	NS	NS	NA		0.0083		NA		0.0031	U
	1,2-Dichloroethane	mg/kg	0.1	NS	NS	NA		0.0006	U	NA		0.00078	U
	1,1,1-Trichloroethane	mg/kg	30	NS	NS	NA		0.0003	U	NA		0.00039	U
	Bromodichloromethane	mg/kg	0.1	NS	NS	NA		0.0003	U	NA		0.00039	U
	trans-1,3-Dichloropropene	mg/kg	0.01	NS	NS	NA		0.0006	U	NA		0.00078	U
	cis-1,3-Dichloropropene	mg/kg	0.01	NS	NS	NA		0.0003	U	NA		0.00039	U
	1,3-Dichloropropene, Total	mg/kg	0.01	NS	NS	NA		0.0003	U	NA		0.00039	U
	1,1-Dichloropropene	mg/kg	0.01(4)	NS	NS	NA		0.0003	U	NA		0.00039	U
	Bromoform	mg/kg	0.1	NS	NS	NA		0.0024	U	NA		0.0031	U
	1,1,2,2-Tetrachloroethane	mg/kg	0.005	NS	NS	NA		0.0003	U	NA		0.00039	U
	Benzene	mg/kg	2	NS	NS	NA		0.0003	U	NA		0.00039	U
	Toluene	mg/kg	30	NS	NS	NA		0.0006	U	NA		0.00078	U
	Ethylbenzene	mg/kg	40	NS	NS	NA		0.0006	U	NA		0.00078	U
	Chloromethane	mg/kg	100	NS	NS	NA		0.0024	U	NA		0.0031	U
	Bromomethane	mg/kg	0.5	NS	NS	NA		0.0012	U	NA		0.0016	U
	Vinyl chloride	mg/kg	0.7	NS	NS	NA		0.0006	U	NA		0.00078	U
	Chloroethane	mg/kg	100	NS	NS	NA		0.0012	U	NA		0.0016	U
	1,1-Dichloroethene	mg/kg	3	NS	NS	NA		0.0006	U	NA		0.00078	U
	trans-1,2-Dichloroethene	mg/kg	1	NS	NS	NA		0.0009	U	NA		0.0012	U
	Trichloroethene	mg/kg	0.3	NS	NS	NA		0.0003	U	NA		0.00039	U
	1,2-Dichlorobenzene	mg/kg	9	NS	NS	NA		0.0012	U	NA		0.0016	U
	1,3-Dichlorobenzene	mg/kg	3	NS	NS	NA		0.0012	U	NA		0.0016	U
	1,4-Dichlorobenzene	mg/kg	0.7	NS	NS	NA		0.0012	U	NA		0.0016	U
	Methyl tert butyl ether	mg/kg	0.1	NS	NS	NA		0.0012	U	NA		0.0016	U
	p/m-Xylene	mg/kg	100(2)	NS	NS	NA		0.0012	U	NA		0.0016	U
	o-Xylene	mg/kg	100(2)	NS	NS	NA		0.0006	U	NA		0.00078	U
	Xylenes, Total	mg/kg	100	NS	NS	NA		0.0006	U	NA		0.00078	U
	cis-1,2-Dichloroethene	mg/kg	0.1	NS	NS	NA		0.0006	U	NA		0.00078	U
	1,2-Dichloroethene, Total	mg/kg	0.3	NS	NS	NA		0.0006	U	NA		0.00078	U
	Dibromomethane	mg/kg	500	NS	NS	NA		0.0012	U	NA		0.0016	U
	1,2,3-Trichloropropane	mg/kg	100	NS	NS	NA		0.0012	U	NA		0.0016	U
	Styrene	mg/kg	3	NS	NS	NA		0.0006	U	NA		0.00078	U
	Dichlorodifluoromethane	mg/kg	1,000	NS	NS	NA		0.006	U	NA		0.0078	U
	Acetone	mg/kg	6	NS	NS	NA		0.015	U	NA		0.019	U
	Carbon disulfide	mg/kg	100	NS	NS	NA		0.006	U	NA		0.0078	U
	Methyl ethyl ketone	mg/kg	4	NS	NS	NA		0.006	U	NA		0.0078	U
	Methyl isobutyl ketone	mg/kg	0.4	NS	NS	NA		0.006	U	NA		0.0078	U
	2-Hexanone	mg/kg	100	NS	NS	NA		0.006	U	NA		0.0078	U
	Bromochloromethane	mg/kg	NS	NS	NS	NA		0.0012	U	NA		0.0016	U
	Tetrahydrofuran	mg/kg	500	NS	NS	NA		0.0024	U	NA		0.0031	U
	2,2-Dichloropropane	mg/kg	0.1(3)	NS	NS	NA		0.0012	U	NA		0.0016	U
	1,2-Dibromoethane	mg/kg	0.1	NS	NS	NA		0.0006	U	NA		0.00078	U
	1,3-Dichloropropane	mg/kg	500	NS	NS	NA		0.0012	U	NA		0.0016	U
	1,1,1,2-Tetrachloroethane	mg/kg	0.1	NS	NS	NA		0.0003	U	NA		0.00039	U
	Bromobenzene	mg/kg	100	NS	NS	NA		0.0012	U	NA		0.0016	U
	n-Butylbenzene	mg/kg	100(1)	NS	NS	NA		0.0006	U	NA		0.00078	U
	sec-Butylbenzene	mg/kg	100(1)	NS	NS	NA		0.0006	U	NA		0.00078	U
	tert-Butylbenzene	mg/kg	100	NS	NS	NA		0.0012	U	NA		0.0016	U
	o-Chlorotoluene	mg/kg	100	NS	NS	NA		0.0012	U	NA		0.0016	U
	p-Chlorotoluene	mg/kg	100(5)	NS	NS	NA		0.0012	U	NA		0.0016	U

Table 2 - Soil Characterization Analytical Results
Washington Street - RTN 3-34742
Somerville, Massachusetts

Sample Location: Sample Name: Lab Sample ID: Sample Date:						GLC-VMF(20)-RCS-2-FILL(8)-DC				GLC-VMF(20)-RCS-2-FILL(14)-DC			
						GLC-VMF(20)-RCS-2-FILL(8)-DC-COMP		GLC-VMF(20)-RCS-2-FILL(8)-DC-VOC(1)		GLC-VMF(20)-RCS-2-FILL(14)-DC-COMP		GLC-VMF(20)-RCS-2-FILL(14)-DC-VOC-3	
						L2052968-03		L2052968-04		L2053491-01		L2053491-02	
						11/30/2020		11/30/2020		12/2/2020		12/2/2020	
Analysis	Analyte	Units	RCS-1	MA Unlined Landfill*	MA Lined Landfill*								
	1,2-Dibromo-3-chloropropane	mg/kg	10	NS	NS	NA		0.0018	U	NA		0.0023	U
	Hexachlorobutadiene	mg/kg	30	NS	NS	NA		0.0024	U	NA		0.0031	U
	Isopropylbenzene	mg/kg	1,000	NS	NS	NA		0.0006	U	NA		0.00078	U
	p-Isopropyltoluene	mg/kg	100	NS	NS	NA		0.0006	U	NA		0.00078	U
	Naphthalene	mg/kg	4	NS	NS	NA		0.0024	U	NA		0.0031	U
	n-Propylbenzene	mg/kg	100	NS	NS	NA		0.0006	U	NA		0.00078	U
	1,2,3-Trichlorobenzene	mg/kg	NS	NS	NS	NA		0.0012	U	NA		0.0016	U
	1,2,4-Trichlorobenzene	mg/kg	2	NS	NS	NA		0.0012	U	NA		0.0016	U
	1,3,5-Trimethylbenzene	mg/kg	10	NS	NS	NA		0.0012	U	NA		0.0016	U
	1,2,4-Trimethylbenzene	mg/kg	1,000	NS	NS	NA		0.0012	U	NA		0.0016	U
	Diethyl ether	mg/kg	100	NS	NS	NA		0.0012	U	NA		0.0016	U
	Diisopropyl Ether	mg/kg	100	NS	NS	NA		0.0012	U	NA		0.0016	U
	Ethyl-Tert-Butyl-Ether	mg/kg	NS	NS	NS	NA		0.0012	U	NA		0.0016	U
	Tertiary-Amyl Methyl Ether	mg/kg	NS	NS	NS	NA		0.0012	U	NA		0.0016	U
	1,4-Dioxane	mg/kg	0.2	NS	NS	NA		0.048	U	NA		0.062	U
	Total VOCs	mg/kg	NS	4	10	NA		0.0083		NA		0.00057	
SVOCs													
	Acenaphthene	mg/kg	4	NS	NS	0.13	U	NA		0.14	U	NA	
	1,2,4-Trichlorobenzene	mg/kg	2	NS	NS	0.17	U	NA		0.18	U	NA	
	Hexachlorobenzene	mg/kg	0.7	NS	NS	0.07	U	NA		0.076	U	NA	
	Bis(2-chloroethyl)ether	mg/kg	0.7	NS	NS	0.07	U	NA		0.076	U	NA	
	2-Chloronaphthalene	mg/kg	1,000	NS	NS	0.17	U	NA		0.18	U	NA	
	1,2-Dichlorobenzene	mg/kg	9	NS	NS	0.17	U	NA		0.18	U	NA	
	1,3-Dichlorobenzene	mg/kg	3	NS	NS	0.17	U	NA		0.18	U	NA	
	1,4-Dichlorobenzene	mg/kg	0.7	NS	NS	0.07	U	NA		0.076	U	NA	
	3,3'-Dichlorobenzidine	mg/kg	3	NS	NS	0.17	U	NA		0.18	U	NA	
	2,4-Dinitrotoluene	mg/kg	0.7	NS	NS	0.07	U	NA		0.076	U	NA	
	2,6-Dinitrotoluene	mg/kg	100	NS	NS	0.17	U	NA		0.18	U	NA	
	Azobenzene	mg/kg	50	NS	NS	0.17	U	NA		0.18	U	NA	
	Fluoranthene	mg/kg	1,000	NS	NS	0.67		NA		0.7		NA	
	4-Bromophenyl phenyl ether	mg/kg	100	NS	NS	0.17	U	NA		0.18	U	NA	
	Bis(2-chloroisopropyl)ether	mg/kg	0.7	NS	NS	0.07	U	NA		0.076	U	NA	
	Bis(2-chloroethoxy)methane	mg/kg	500	NS	NS	0.18	U	NA		0.2	U	NA	
	Hexachlorobutadiene	mg/kg	30	NS	NS	0.17	U	NA		0.18	U	NA	
	Hexachloroethane	mg/kg	0.7	NS	NS	0.07	U	NA		0.076	U	NA	
	Isophorone	mg/kg	100	NS	NS	0.15	U	NA		0.16	U	NA	
	Naphthalene	mg/kg	4	NS	NS	0.17	U	NA		0.18	U	NA	
	Nitrobenzene	mg/kg	500	NS	NS	0.15	U	NA		0.16	U	NA	
	Bis(2-ethylhexyl)phthalate	mg/kg	90	NS	NS	0.17	U	NA		0.18	U	NA	
	Butyl benzyl phthalate	mg/kg	100	NS	NS	0.17	U	NA		0.18	U	NA	
	Di-n-butylphthalate	mg/kg	50	NS	NS	0.17	U	NA		0.18	U	NA	
	Di-n-octylphthalate	mg/kg	1,000	NS	NS	0.17	U	NA		0.18	U	NA	
	Diethyl phthalate	mg/kg	10	NS	NS	0.17	U	NA		0.18	U	NA	
	Dimethyl phthalate	mg/kg	0.7	NS	NS	0.07	U	NA		0.076	U	NA	
	Benzo(a)anthracene	mg/kg	7	NS	NS	0.31		NA		0.38		NA	
	Benzo(a)pyrene	mg/kg	2	NS	NS	0.34		NA		0.4		NA	
	Benzo(b)fluoranthene	mg/kg	7	NS	NS	0.4		NA		0.51		NA	
	Benzo(k)fluoranthene	mg/kg	70	NS	NS	0.12		NA		0.16		NA	
	Chrysene	mg/kg	70	NS	NS	0.34		NA		0.42		NA	
	Acenaphthylene	mg/kg	1	NS	NS	0.13	U	NA		0.14	U	NA	
	Anthracene	mg/kg	1,000	NS	NS	0.11		NA		0.12		NA	
	Benzo(ghi)perylene	mg/kg	1,000	NS	NS	0.19		NA		0.25		NA	
	Fluorene	mg/kg	1,000	NS	NS	0.17	U	NA		0.18	U	NA	
	Phenanthrene	mg/kg	10	NS	NS	0.46		NA		0.49		NA	
	Dibenzo(a,h)anthracene	mg/kg	0.7	NS	NS	0.07	U	NA		0.076	U	NA	
	Indeno(1,2,3-cd)pyrene	mg/kg	7	NS	NS	0.2		NA		0.26		NA	
	Pyrene	mg/kg	1,000	NS	NS	0.61		NA		0.64		NA	
	Aniline	mg/kg	1,000	NS	NS	0.2	U	NA		0.22	U	NA	
	4-Chloroaniline	mg/kg	1	NS	NS	0.17	U	NA		0.18	U	NA	
	Dibenzofuran	mg/kg	100	NS	NS	0.17	U	NA		0.18	U	NA	
	2-Methylnaphthalene	mg/kg	0.7	NS	NS	0.076		NA		0.12		NA	

Table 2 - Soil Characterization Analytical Results
Washington Street - RTN 3-34742
Somerville, Massachusetts

Sample Location: Sample Name: Lab Sample ID: Sample Date:						GLC-VMF(20)-RCS-2-FILL(8)- DC				GLC-VMF(20)-RCS-2-FILL(14)- DC			
						GLC-VMF(20)- RCS-2-FILL(8)- DC-COMP		GLC-VMF(20)- RCS-2-FILL(8)- DC-VOC(1)		GLC-VMF(20)- RCS-2-FILL(14)- DC-COMP		GLC-VMF(20)- RCS-2-FILL(14)- DC-VOC-3	
						L2052968-03		L2052968-04		L2053491-01		L2053491-02	
11/30/2020		11/30/2020		12/2/2020		12/2/2020							
Analysis	Analyte	Units	RCS-1	MA Unlined Landfill*	MA Lined Landfill*								
	Acetophenone	mg/kg	1,000	NS	NS	0.17	U	NA		0.18	U	NA	
	2,4,6-Trichlorophenol	mg/kg	0.7	NS	NS	0.07	U	NA		0.076	U	NA	
	2-Chlorophenol	mg/kg	0.7	NS	NS	0.07	U	NA		0.076	U	NA	
	2,4-Dichlorophenol	mg/kg	0.7	NS	NS	0.07	U	NA		0.076	U	NA	
	2,4-Dimethylphenol	mg/kg	0.7	NS	NS	0.07	U	NA		0.076	U	NA	
	2-Nitrophenol	mg/kg	100	NS	NS	0.36	U	NA		0.39	U	NA	
	4-Nitrophenol	mg/kg	100	NS	NS	0.23	U	NA		0.25	U	NA	
	2,4-Dinitrophenol	mg/kg	3	NS	NS	0.8	U	NA		0.87	U	NA	
	Pentachlorophenol	mg/kg	3	NS	NS	0.33	U	NA		0.36	U	NA	
	Phenol	mg/kg	1	NS	NS	0.17	U	NA		0.18	U	NA	
	2-Methylphenol	mg/kg	500	NS	NS	0.17	U	NA		0.18	U	NA	
	3-Methylphenol/4-Methylphenol	mg/kg	500	NS	NS	0.24	U	NA		0.26	U	NA	
	2,4,5-Trichlorophenol	mg/kg	4	NS	NS	0.17	U	NA		0.18	U	NA	
	Pyridine	mg/kg	500	NS	NS	0.18	U	NA		0.2	U	NA	
	Total SVOCs	mg/kg	NS	100	100	3.826		NA		4.45		NA	
PCBs													
	Aroclor 1016	mg/kg	1	NS	NS	0.168	U	NA		0.0364	U	NA	
	Aroclor 1221	mg/kg	1	NS	NS	0.168	U	NA		0.0364	U	NA	
	Aroclor 1232	mg/kg	1	NS	NS	0.168	U	NA		0.0364	U	NA	
	Aroclor 1242	mg/kg	1	NS	NS	0.168	U	NA		0.0364	U	NA	
	Aroclor 1248	mg/kg	1	NS	NS	0.168	U	NA		0.0364	U	NA	
	Aroclor 1254	mg/kg	1	NS	NS	0.854		NA		0.0917		NA	
	Aroclor 1260	mg/kg	1	NS	NS	0.168	U	NA		0.0364	U	NA	
	Aroclor 1262	mg/kg	1	NS	NS	0.168	U	NA		0.0364	U	NA	
	Aroclor 1268	mg/kg	1	NS	NS	0.168	U	NA		0.0364	U	NA	
	PCBs, Total	mg/kg	1	2	2	0.854		NA		0.0917		NA	
Pesticides													
	Delta-BHC	mg/kg	10	NS	NS	0.00154	U	NA		0.00172	U	NA	
	Lindane	mg/kg	0.003	NS	NS	0.000515	U	NA		0.000574	U	NA	
	Alpha-BHC	mg/kg	50	NS	NS	0.000644	U	NA		0.000718	U	NA	
	Beta-BHC	mg/kg	10	NS	NS	0.00154	U	NA		0.00172	U	NA	
	Heptachlor	mg/kg	0.3	NS	NS	0.000773	U	NA		0.000861	U	NA	
	Aldrin	mg/kg	0.08	NS	NS	0.00154	U	NA		0.00172	U	NA	
	Heptachlor epoxide	mg/kg	0.1	NS	NS	0.0029	U	NA		0.00323	U	NA	
	Endrin	mg/kg	10	NS	NS	0.000644	U	NA		0.000718	U	NA	
	Endrin ketone	mg/kg	NS	NS	NS	0.00154	U	NA		0.00172	U	NA	
	Dieldrin	mg/kg	0.08	NS	NS	0.000966	U	NA		0.00108	U	NA	
	4,4'-DDE	mg/kg	6	NS	NS	0.00154	U	NA		0.00172	U	NA	
	4,4'-DDD	mg/kg	8	NS	NS	0.00676		NA		0.00172	U	NA	
	4,4'-DDT	mg/kg	6	NS	NS	0.0156	IP	NA		0.00323	U	NA	
	Endosulfan I	mg/kg	0.5	NS	NS	0.00154	U	NA		0.00172	U	NA	
	Endosulfan II	mg/kg	0.5	NS	NS	0.00154	U	NA		0.00172	U	NA	
	Endosulfan sulfate	mg/kg	NS	NS	NS	0.000644	U	NA		0.000718	U	NA	
	Methoxychlor	mg/kg	200	NS	NS	0.0029	U	NA		0.00323	U	NA	
	Chlordane	mg/kg	0.7	NS	NS	0.0245	IP	NA		0.0144	U	NA	
	Hexachlorobenzene	mg/kg	0.7	NS	NS	0.00154	U	NA		0.00172	U	NA	
Herbicides													
	MCP	mg/kg	NS	NS	NS	3.4	U	NA		3.6	U	NA	
	MCPA	mg/kg	100	NS	NS	3.4	U	NA		3.6	U	NA	
	Dalapon	mg/kg	1,000	NS	NS	0.034	U	NA		0.036	U	NA	
	Dicamba	mg/kg	500	NS	NS	0.034	U	NA		0.036	U	NA	
	Dichloroprop	mg/kg	NS	NS	NS	0.034	U	NA		0.036	U	NA	
	2,4-D	mg/kg	100	NS	NS	0.034	U	NA		0.036	U	NA	
	2,4-DB	mg/kg	100	NS	NS	0.034	U	NA		0.036	U	NA	
	2,4,5-T	mg/kg	100	NS	NS	0.034	U	NA		0.036	U	NA	
	2,4,5-TP (Silvex)	mg/kg	100	NS	NS	0.034	U	NA		0.036	U	NA	

Table 2 - Soil Characterization Analytical Results
Washington Street - RTN 3-34742
Somerville, Massachusetts

Sample Location: Sample Name: Lab Sample ID: Sample Date:						GLC-VMF(20)-RCS-2-FILL(8)-DC				GLC-VMF(20)-RCS-2-FILL(14)-DC			
						GLC-VMF(20)-RCS-2-FILL(8)-DC-COMP		GLC-VMF(20)-RCS-2-FILL(8)-DC-VOC(1)		GLC-VMF(20)-RCS-2-FILL(14)-DC-COMP		GLC-VMF(20)-RCS-2-FILL(14)-DC-VOC-3	
						L2052968-03		L2052968-04		L2053491-01		L2053491-02	
						11/30/2020		11/30/2020		12/2/2020		12/2/2020	
Analysis	Analyte	Units	RCS-1	MA Unlined Landfill*	MA Lined Landfill*								
TPH													
	TPH (C10-C36)	mg/kg	1,000	2,500	5,000	86.4		NA		112		NA	
Metals, total													
	Antimony	mg/kg	20	NS	NS	2.05	U	NA		2.13	U	NA	
	Arsenic	mg/kg	20	40	40	5.16		NA		5.79		NA	
	Barium	mg/kg	1,000	NS	NS	36		NA		28.7		NA	
	Beryllium	mg/kg	90	NS	NS	0.217		NA		0.213	U	NA	
	Cadmium	mg/kg	70	30	80	0.553		NA		0.549		NA	
	Chromium	mg/kg	100	1,000	1,000	16.2		NA		14.3		NA	
	Lead	mg/kg	200	1,000	2,000	29.5		NA		28.2		NA	
	Mercury	mg/kg	20	10	10	0.093		NA		0.112		NA	
	Nickel	mg/kg	600	NS	NS	13.2		NA		12.2		NA	
	Selenium	mg/kg	400	NS	NS	2.05	U	NA		2.13	U	NA	
	Silver	mg/kg	100	NS	NS	0.41	U	NA		0.425	U	NA	
	Thallium	mg/kg	8	NS	NS	2.05	U	NA		2.13	U	NA	
	Vanadium	mg/kg	400	NS	NS	32.4		NA		29.8		NA	
	Zinc	mg/kg	1,000	NS	NS	53.8		NA		56.3		NA	
General Chemistry													
	Specific Conductance	umhos/cm	NS	4,000	8,000	95		NA		74		NA	
	pH	SU	NS	NS	NS	8.1		NA		8.4		NA	
	Cyanide, Reactive	mg/kg	NS	NS	NS	10	U	NA		10	U	NA	
	Sulfide, Reactive	mg/kg	NS	NS	NS	10	U	NA		10	U	NA	
	Ignitability		NS	NS	NS	NI		NA		NI		NA	

Notes:
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
su - Standard unit.
umhos/cm - Micro-mhos per centimeter.
I - The lower value for the two columns has been reported due to obvious interference.
ND - Not detected.
NI - Not ignitable.
NA - Sample not analyzed for the listed analyte.
NS - No MassDEP standards exist for this analyte.
P - The relative percent difference (RPD) between the results for the two columns exceeds the method-specified criteria.
U - Analyte was not detected at specified quantitation limit.
Values in **bold** indicate the analyte was detected.
VOCs - Volatile Organic Compounds.
SVOCs - Semivolatile Organic Compounds.
PCBs - Polychlorinated Biphenyls.
TPH - Total Petroleum Hydrocarbons.
RC - Reportable concentration.
(1) - MassDEP RC for C9-C10 aromatics used.
(2) - Criteria applicable to xylene (total), the sum of the xylene isomers.
(3) - MassDEP RC for Dichloropropane used.
(4) - MassDEP RC for Dichloropropene used.
(5) - MassDEP RC for Chlorotoluene used.
* - Reuse and Disposal of Contaminated Soil at Massachusetts Landfills, MassDEP Policy # COMM-97-001, August 1997.

Table 2 - Soil Characterization Analytical Results
Washington Street - RTN 3-34742
Somerville, Massachusetts

Sample Location: Sample Name: Lab Sample ID: Sample Date:						GLC-VMF(20)-RCS-2-FILL(13)- DC				GLC-VMF(20)-RCS-2-FILL(25)- DC			
						GLC-VMF(20)- RCS-2-FILL(13)- DC-COMP		GLC-VMF(20)- RCS-2-FILL(13)- DC-VOC-6		GLC-VMF(20)- RCS-2-FILL(25)- DC-COMP		GLC-VMF(20)- RCS-2-FILL(25)- DC-VOC-4	
						L2053491-03		L2053491-04		L2055561-03		L2055561-04	
						12/2/2020		12/2/2020		12/11/2020		12/11/2020	
Analysis	Analyte	Units	RCS-1	MA Unlined Landfill*	MA Lined Landfill*								
VOCs													
	Methylene chloride	mg/kg	0.1	NS	NS	NA		0.0035	U	NA		0.0036	U
	1,1-Dichloroethane	mg/kg	0.4	NS	NS	NA		0.0007	U	NA		0.00073	U
	Chloroform	mg/kg	0.2	NS	NS	NA		0.001	U	NA		0.0011	U
	Carbon tetrachloride	mg/kg	5	NS	NS	NA		0.0007	U	NA		0.00073	U
	1,2-Dichloropropane	mg/kg	0.1	NS	NS	NA		0.0007	U	NA		0.00073	U
	Dibromochloromethane	mg/kg	0.005	NS	NS	NA		0.0007	U	NA		0.00073	U
	1,1,2-Trichloroethane	mg/kg	0.1	NS	NS	NA		0.0007	U	NA		0.00073	U
	Tetrachloroethene	mg/kg	1	NS	NS	NA		0.00035	U	NA		0.00044	
	Chlorobenzene	mg/kg	1	NS	NS	NA		0.00035	U	NA		0.00036	U
	Trichlorofluoromethane	mg/kg	1,000	NS	NS	NA		0.0028	U	NA		0.0029	U
	1,2-Dichloroethane	mg/kg	0.1	NS	NS	NA		0.0007	U	NA		0.00073	U
	1,1,1-Trichloroethane	mg/kg	30	NS	NS	NA		0.00035	U	NA		0.00036	U
	Bromodichloromethane	mg/kg	0.1	NS	NS	NA		0.00035	U	NA		0.00036	U
	trans-1,3-Dichloropropene	mg/kg	0.01	NS	NS	NA		0.0007	U	NA		0.00073	U
	cis-1,3-Dichloropropene	mg/kg	0.01	NS	NS	NA		0.00035	U	NA		0.00036	U
	1,3-Dichloropropene, Total	mg/kg	0.01	NS	NS	NA		0.00035	U	NA		0.00036	U
	1,1-Dichloropropene	mg/kg	0.01(4)	NS	NS	NA		0.00035	U	NA		0.00036	U
	Bromoform	mg/kg	0.1	NS	NS	NA		0.0028	U	NA		0.0029	U
	1,1,2,2-Tetrachloroethane	mg/kg	0.005	NS	NS	NA		0.00035	U	NA		0.00036	U
	Benzene	mg/kg	2	NS	NS	NA		0.00035	U	NA		0.00036	U
	Toluene	mg/kg	30	NS	NS	NA		0.0007	U	NA		0.00073	U
	Ethylbenzene	mg/kg	40	NS	NS	NA		0.0007	U	NA		0.00073	U
	Chloromethane	mg/kg	100	NS	NS	NA		0.0028	U	NA		0.0029	U
	Bromomethane	mg/kg	0.5	NS	NS	NA		0.0014	U	NA		0.0015	U
	Vinyl chloride	mg/kg	0.7	NS	NS	NA		0.0007	U	NA		0.00073	U
	Chloroethane	mg/kg	100	NS	NS	NA		0.0014	U	NA		0.0015	U
	1,1-Dichloroethene	mg/kg	3	NS	NS	NA		0.0007	U	NA		0.00073	U
	trans-1,2-Dichloroethene	mg/kg	1	NS	NS	NA		0.001	U	NA		0.0011	U
	Trichloroethene	mg/kg	0.3	NS	NS	NA		0.00035	U	NA		0.00036	U
	1,2-Dichlorobenzene	mg/kg	9	NS	NS	NA		0.0014	U	NA		0.0015	U
	1,3-Dichlorobenzene	mg/kg	3	NS	NS	NA		0.0014	U	NA		0.0015	U
	1,4-Dichlorobenzene	mg/kg	0.7	NS	NS	NA		0.0014	U	NA		0.0015	U
	Methyl tert butyl ether	mg/kg	0.1	NS	NS	NA		0.0014	U	NA		0.0015	U
	p/m-Xylene	mg/kg	100(2)	NS	NS	NA		0.0014	U	NA		0.0015	U
	o-Xylene	mg/kg	100(2)	NS	NS	NA		0.0007	U	NA		0.00073	U
	Xylenes, Total	mg/kg	100	NS	NS	NA		0.0007	U	NA		0.00073	U
	cis-1,2-Dichloroethene	mg/kg	0.1	NS	NS	NA		0.0007	U	NA		0.00073	U
	1,2-Dichloroethene, Total	mg/kg	0.3	NS	NS	NA		0.0007	U	NA		0.00073	U
	Dibromomethane	mg/kg	500	NS	NS	NA		0.0014	U	NA		0.0015	U
	1,2,3-Trichloropropane	mg/kg	100	NS	NS	NA		0.0014	U	NA		0.0015	U
	Styrene	mg/kg	3	NS	NS	NA		0.0007	U	NA		0.00073	U
	Dichlorodifluoromethane	mg/kg	1,000	NS	NS	NA		0.007	U	NA		0.0073	U
	Acetone	mg/kg	6	NS	NS	NA		0.017	U	NA		0.018	U
	Carbon disulfide	mg/kg	100	NS	NS	NA		0.007	U	NA		0.0073	U
	Methyl ethyl ketone	mg/kg	4	NS	NS	NA		0.007	U	NA		0.0073	U
	Methyl isobutyl ketone	mg/kg	0.4	NS	NS	NA		0.007	U	NA		0.0073	U
	2-Hexanone	mg/kg	100	NS	NS	NA		0.007	U	NA		0.0073	U
	Bromochloromethane	mg/kg	NS	NS	NS	NA		0.0014	U	NA		0.0015	U
	Tetrahydrofuran	mg/kg	500	NS	NS	NA		0.0028	U	NA		0.0029	U
	2,2-Dichloropropane	mg/kg	0.1(3)	NS	NS	NA		0.0014	U	NA		0.0015	U
	1,2-Dibromoethane	mg/kg	0.1	NS	NS	NA		0.0007	U	NA		0.00073	U
	1,3-Dichloropropane	mg/kg	500	NS	NS	NA		0.0014	U	NA		0.0015	U
	1,1,1,2-Tetrachloroethane	mg/kg	0.1	NS	NS	NA		0.00035	U	NA		0.00036	U
	Bromobenzene	mg/kg	100	NS	NS	NA		0.0014	U	NA		0.0015	U
	n-Butylbenzene	mg/kg	100(1)	NS	NS	NA		0.0007	U	NA		0.00073	U
	sec-Butylbenzene	mg/kg	100(1)	NS	NS	NA		0.0007	U	NA		0.00073	U
	tert-Butylbenzene	mg/kg	100	NS	NS	NA		0.0014	U	NA		0.0015	U
	o-Chlorotoluene	mg/kg	100	NS	NS	NA		0.0014	U	NA		0.0015	U
	p-Chlorotoluene	mg/kg	100(5)	NS	NS	NA		0.0014	U	NA		0.0015	U

Table 2 - Soil Characterization Analytical Results
Washington Street - RTN 3-34742
Somerville, Massachusetts

Sample Location: Sample Name: Lab Sample ID: Sample Date:						GLC-VMF(20)-RCS-2-FILL(13)-DC				GLC-VMF(20)-RCS-2-FILL(25)-DC			
						GLC-VMF(20)-RCS-2-FILL(13)-DC-COMP		GLC-VMF(20)-RCS-2-FILL(13)-DC-VOC-6		GLC-VMF(20)-RCS-2-FILL(25)-DC-COMP		GLC-VMF(20)-RCS-2-FILL(25)-DC-VOC-4	
						L2053491-03		L2053491-04		L2055561-03		L2055561-04	
						12/2/2020		12/2/2020		12/11/2020		12/11/2020	
Analysis	Analyte	Units	RCS-1	MA Unlined Landfill*	MA Lined Landfill*								
	1,2-Dibromo-3-chloropropane	mg/kg	10	NS	NS	NA		0.0021	U	NA		0.0022	U
	Hexachlorobutadiene	mg/kg	30	NS	NS	NA		0.0028	U	NA		0.0029	U
	Isopropylbenzene	mg/kg	1,000	NS	NS	NA		0.0007	U	NA		0.00073	U
	p-Isopropyltoluene	mg/kg	100	NS	NS	NA		0.0007	U	NA		0.00073	U
	Naphthalene	mg/kg	4	NS	NS	NA		0.0028	U	NA		0.0029	U
	n-Propylbenzene	mg/kg	100	NS	NS	NA		0.0007	U	NA		0.00073	U
	1,2,3-Trichlorobenzene	mg/kg	NS	NS	NS	NA		0.0014	U	NA		0.0015	U
	1,2,4-Trichlorobenzene	mg/kg	2	NS	NS	NA		0.0014	U	NA		0.0015	U
	1,3,5-Trimethylbenzene	mg/kg	10	NS	NS	NA		0.0014	U	NA		0.0015	U
	1,2,4-Trimethylbenzene	mg/kg	1,000	NS	NS	NA		0.0014	U	NA		0.0015	U
	Diethyl ether	mg/kg	100	NS	NS	NA		0.0014	U	NA		0.0015	U
	Diisopropyl Ether	mg/kg	100	NS	NS	NA		0.0014	U	NA		0.0015	U
	Ethyl-Tert-Butyl-Ether	mg/kg	NS	NS	NS	NA		0.0014	U	NA		0.0015	U
	Tertiary-Amyl Methyl Ether	mg/kg	NS	NS	NS	NA		0.0014	U	NA		0.0015	U
	1,4-Dioxane	mg/kg	0.2	NS	NS	NA		0.056	U	NA		0.058	U
	Total VOCs	mg/kg	NS	4	10	NA		ND		NA		0.00044	
SVOCs													
	Acenaphthene	mg/kg	4	NS	NS	0.15	U	NA		0.14	U	NA	
	1,2,4-Trichlorobenzene	mg/kg	2	NS	NS	0.18	U	NA		0.18	U	NA	
	Hexachlorobenzene	mg/kg	0.7	NS	NS	0.077	U	NA		0.074	U	NA	
	Bis(2-chloroethyl)ether	mg/kg	0.7	NS	NS	0.077	U	NA		0.074	U	NA	
	2-Chloronaphthalene	mg/kg	1,000	NS	NS	0.18	U	NA		0.18	U	NA	
	1,2-Dichlorobenzene	mg/kg	9	NS	NS	0.18	U	NA		0.18	U	NA	
	1,3-Dichlorobenzene	mg/kg	3	NS	NS	0.18	U	NA		0.18	U	NA	
	1,4-Dichlorobenzene	mg/kg	0.7	NS	NS	0.077	U	NA		0.074	U	NA	
	3,3'-Dichlorobenzidine	mg/kg	3	NS	NS	0.18	U	NA		0.18	U	NA	
	2,4-Dinitrotoluene	mg/kg	0.7	NS	NS	0.077	U	NA		0.074	U	NA	
	2,6-Dinitrotoluene	mg/kg	100	NS	NS	0.18	U	NA		0.18	U	NA	
	Azobenzene	mg/kg	50	NS	NS	0.18	U	NA		0.18	U	NA	
	Fluoranthene	mg/kg	1,000	NS	NS	0.9		NA		1.3		NA	
	4-Bromophenyl phenyl ether	mg/kg	100	NS	NS	0.18	U	NA		0.18	U	NA	
	Bis(2-chloroisopropyl)ether	mg/kg	0.7	NS	NS	0.077	U	NA		0.074	U	NA	
	Bis(2-chloroethoxy)methane	mg/kg	500	NS	NS	0.2	U	NA		0.19	U	NA	
	Hexachlorobutadiene	mg/kg	30	NS	NS	0.18	U	NA		0.18	U	NA	
	Hexachloroethane	mg/kg	0.7	NS	NS	0.077	U	NA		0.074	U	NA	
	Isophorone	mg/kg	100	NS	NS	0.16	U	NA		0.16	U	NA	
	Naphthalene	mg/kg	4	NS	NS	0.37		NA		0.2		NA	
	Nitrobenzene	mg/kg	500	NS	NS	0.16	U	NA		0.16	U	NA	
	Bis(2-ethylhexyl)phthalate	mg/kg	90	NS	NS	0.37		NA		0.18	U	NA	
	Butyl benzyl phthalate	mg/kg	100	NS	NS	0.18	U	NA		0.18	U	NA	
	Di-n-butylphthalate	mg/kg	50	NS	NS	0.18	U	NA		0.18	U	NA	
	Di-n-octylphthalate	mg/kg	1,000	NS	NS	0.18	U	NA		0.18	U	NA	
	Diethyl phthalate	mg/kg	10	NS	NS	0.18	U	NA		0.18	U	NA	
	Dimethyl phthalate	mg/kg	0.7	NS	NS	0.077	U	NA		0.074	U	NA	
	Benzo(a)anthracene	mg/kg	7	NS	NS	0.48		NA		0.73		NA	
	Benzo(a)pyrene	mg/kg	2	NS	NS	0.48		NA		0.61		NA	
	Benzo(b)fluoranthene	mg/kg	7	NS	NS	0.6		NA		0.82		NA	
	Benzo(k)fluoranthene	mg/kg	70	NS	NS	0.21		NA		0.21		NA	
	Chrysene	mg/kg	70	NS	NS	0.48		NA		0.68		NA	
	Acenaphthylene	mg/kg	1	NS	NS	0.15	U	NA		0.14	U	NA	
	Anthracene	mg/kg	1,000	NS	NS	0.17		NA		0.27		NA	
	Benzo(ghi)perylene	mg/kg	1,000	NS	NS	0.28		NA		0.38		NA	
	Fluorene	mg/kg	1,000	NS	NS	0.18	U	NA		0.18	U	NA	
	Phenanthrene	mg/kg	10	NS	NS	0.67		NA		0.84		NA	
	Dibenzo(a,h)anthracene	mg/kg	0.7	NS	NS	0.077	U	NA		0.092		NA	
	Indeno(1,2,3-cd)pyrene	mg/kg	7	NS	NS	0.31		NA		0.37		NA	
	Pyrene	mg/kg	1,000	NS	NS	0.79		NA		1.2		NA	
	Aniline	mg/kg	1,000	NS	NS	0.22	U	NA		0.21	U	NA	
	4-Chloroaniline	mg/kg	1	NS	NS	0.18	U	NA		0.18	U	NA	
	Dibenzofuran	mg/kg	100	NS	NS	0.18	U	NA		0.18	U	NA	
	2-Methylnaphthalene	mg/kg	0.7	NS	NS	0.2		NA		0.12		NA	

Table 2 - Soil Characterization Analytical Results
Washington Street - RTN 3-34742
Somerville, Massachusetts

Sample Location: Sample Name: Lab Sample ID: Sample Date:						GLC-VMF(20)-RCS-2-FILL(13)- DC				GLC-VMF(20)-RCS-2-FILL(25)- DC			
						GLC-VMF(20)- RCS-2-FILL(13)- DC-COMP		GLC-VMF(20)- RCS-2-FILL(13)- DC-VOC-6		GLC-VMF(20)- RCS-2-FILL(25)- DC-COMP		GLC-VMF(20)- RCS-2-FILL(25)- DC-VOC-4	
						L2053491-03		L2053491-04		L2055561-03		L2055561-04	
						12/2/2020		12/2/2020		12/11/2020		12/11/2020	
Analysis	Analyte	Units	RCS-1	MA Unlined Landfill*	MA Lined Landfill*								
	Acetophenone	mg/kg	1,000	NS	NS	0.18	U	NA		0.18	U	NA	
	2,4,6-Trichlorophenol	mg/kg	0.7	NS	NS	0.077	U	NA		0.074	U	NA	
	2-Chlorophenol	mg/kg	0.7	NS	NS	0.077	U	NA		0.074	U	NA	
	2,4-Dichlorophenol	mg/kg	0.7	NS	NS	0.077	U	NA		0.074	U	NA	
	2,4-Dimethylphenol	mg/kg	0.7	NS	NS	0.077	U	NA		0.074	U	NA	
	2-Nitrophenol	mg/kg	100	NS	NS	0.4	U	NA		0.38	U	NA	
	4-Nitrophenol	mg/kg	100	NS	NS	0.26	U	NA		0.25	U	NA	
	2,4-Dinitrophenol	mg/kg	3	NS	NS	0.88	U	NA		0.85	U	NA	
	Pentachlorophenol	mg/kg	3	NS	NS	0.37	U	NA		0.35	U	NA	
	Phenol	mg/kg	1	NS	NS	0.18	U	NA		0.18	U	NA	
	2-Methylphenol	mg/kg	500	NS	NS	0.18	U	NA		0.18	U	NA	
	3-Methylphenol/4-Methylphenol	mg/kg	500	NS	NS	0.26	U	NA		0.25	U	NA	
	2,4,5-Trichlorophenol	mg/kg	4	NS	NS	0.18	U	NA		0.18	U	NA	
	Pyridine	mg/kg	500	NS	NS	0.2	U	NA		0.19	U	NA	
	Total SVOCs	mg/kg	NS	100	100	6.31		NA		7.822		NA	
PCBs													
	Aroclor 1016	mg/kg	1	NS	NS	0.0367	U	NA		0.0346	U	NA	
	Aroclor 1221	mg/kg	1	NS	NS	0.0367	U	NA		0.0346	U	NA	
	Aroclor 1232	mg/kg	1	NS	NS	0.0367	U	NA		0.0346	U	NA	
	Aroclor 1242	mg/kg	1	NS	NS	0.0367	U	NA		0.0346	U	NA	
	Aroclor 1248	mg/kg	1	NS	NS	0.0367	U	NA		0.0346	U	NA	
	Aroclor 1254	mg/kg	1	NS	NS	0.359		NA		0.389		NA	
	Aroclor 1260	mg/kg	1	NS	NS	0.0367	U	NA		0.0346	U	NA	
	Aroclor 1262	mg/kg	1	NS	NS	0.0367	U	NA		0.0346	U	NA	
	Aroclor 1268	mg/kg	1	NS	NS	0.0367	U	NA		0.0346	U	NA	
	PCBs, Total	mg/kg	1	2	2	0.359		NA		0.389		NA	
Pesticides													
	Delta-BHC	mg/kg	10	NS	NS	0.00169	U	NA		0.00168	U	NA	
	Lindane	mg/kg	0.003	NS	NS	0.000564	U	NA		0.000559	U	NA	
	Alpha-BHC	mg/kg	50	NS	NS	0.000706	U	NA		0.000699	U	NA	
	Beta-BHC	mg/kg	10	NS	NS	0.00169	U	NA		0.00168	U	NA	
	Heptachlor	mg/kg	0.3	NS	NS	0.000847	U	NA		0.000839	U	NA	
	Aldrin	mg/kg	0.08	NS	NS	0.00169	U	NA		0.00168	U	NA	
	Heptachlor epoxide	mg/kg	0.1	NS	NS	0.00318	U	NA		0.00315	U	NA	
	Endrin	mg/kg	10	NS	NS	0.000706	U	NA		0.000699	U	NA	
	Endrin ketone	mg/kg	NS	NS	NS	0.00169	U	NA		0.00168	U	NA	
	Dieldrin	mg/kg	0.08	NS	NS	0.00106	U	NA		0.00105	U	NA	
	4,4'-DDE	mg/kg	6	NS	NS	0.00169	U	NA		0.00168	U	NA	
	4,4'-DDD	mg/kg	8	NS	NS	0.00169	U	NA		0.00606		NA	
	4,4'-DDT	mg/kg	6	NS	NS	0.00318	U	NA		0.00315	U	NA	
	Endosulfan I	mg/kg	0.5	NS	NS	0.00169	U	NA		0.00168	U	NA	
	Endosulfan II	mg/kg	0.5	NS	NS	0.00169	U	NA		0.00168	U	NA	
	Endosulfan sulfate	mg/kg	NS	NS	NS	0.000706	U	NA		0.000699	U	NA	
	Methoxychlor	mg/kg	200	NS	NS	0.00318	U	NA		0.00315	U	NA	
	Chlordane	mg/kg	0.7	NS	NS	0.0141	U	NA		0.014	U	NA	
	Hexachlorobenzene	mg/kg	0.7	NS	NS	0.00169	U	NA		0.00168	U	NA	
Herbicides													
	MCP	mg/kg	NS	NS	NS	3.7	U	NA		3.6	U	NA	
	MCPA	mg/kg	100	NS	NS	3.7	U	NA		3.6	U	NA	
	Dalapon	mg/kg	1,000	NS	NS	0.037	U	NA		0.036	U	NA	
	Dicamba	mg/kg	500	NS	NS	0.037	U	NA		0.036	U	NA	
	Dichloroprop	mg/kg	NS	NS	NS	0.037	U	NA		0.036	U	NA	
	2,4-D	mg/kg	100	NS	NS	0.037	U	NA		0.036	U	NA	
	2,4-DB	mg/kg	100	NS	NS	0.037	U	NA		0.036	U	NA	
	2,4,5-T	mg/kg	100	NS	NS	0.037	U	NA		0.036	U	NA	
	2,4,5-TP (Silvex)	mg/kg	100	NS	NS	0.037	U	NA		0.036	U	NA	

Table 2 - Soil Characterization Analytical Results
Washington Street - RTN 3-34742
Somerville, Massachusetts

Sample Location: Sample Name: Lab Sample ID: Sample Date:						GLC-VMF(20)-RCS-2-FILL(13)-DC				GLC-VMF(20)-RCS-2-FILL(25)-DC			
						GLC-VMF(20)-RCS-2-FILL(13)-DC-COMP		GLC-VMF(20)-RCS-2-FILL(13)-DC-VOC-6		GLC-VMF(20)-RCS-2-FILL(25)-DC-COMP		GLC-VMF(20)-RCS-2-FILL(25)-DC-VOC-4	
						L2053491-03		L2053491-04		L2055561-03		L2055561-04	
						12/2/2020		12/2/2020		12/11/2020		12/11/2020	
Analysis	Analyte	Units	RCS-1	MA Unlined Landfill*	MA Lined Landfill*								
TPH													
	TPH (C10-C36)	mg/kg	1,000	2,500	5,000	130		NA		59.8		NA	
Metals, total													
	Antimony	mg/kg	20	NS	NS	2.17	U	NA		2.12	U	NA	
	Arsenic	mg/kg	20	40	40	7.58		NA		3.61		NA	
	Barium	mg/kg	1,000	NS	NS	37.3		NA		42.6		NA	
	Beryllium	mg/kg	90	NS	NS	0.217		NA		0.212	U	NA	
	Cadmium	mg/kg	70	30	80	0.596		NA		0.658		NA	
	Chromium	mg/kg	100	1,000	1,000	13.6		NA		19.6		NA	
	Lead	mg/kg	200	1,000	2,000	37.5		NA		27.1		NA	
	Mercury	mg/kg	20	10	10	0.1		NA		0.107		NA	
	Nickel	mg/kg	600	NS	NS	13.5		NA		15.2		NA	
	Selenium	mg/kg	400	NS	NS	2.17	U	NA		2.12	U	NA	
	Silver	mg/kg	100	NS	NS	0.435	U	NA		0.424	U	NA	
	Thallium	mg/kg	8	NS	NS	2.17	U	NA		2.12	U	NA	
	Vanadium	mg/kg	400	NS	NS	32.4		NA		37.4		NA	
	Zinc	mg/kg	1,000	NS	NS	73.1		NA		61.5		NA	
General Chemistry													
	Specific Conductance	umhos/cm	NS	4,000	8,000	82		NA		100		NA	
	pH	SU	NS	NS	NS	7.8		NA		8		NA	
	Cyanide, Reactive	mg/kg	NS	NS	NS	10	U	NA		10	U	NA	
	Sulfide, Reactive	mg/kg	NS	NS	NS	10	U	NA		10	U	NA	
	Ignitability		NS	NS	NS	NI		NA		NI		NA	

Notes:
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
su - Standard unit.
umhos/cm - Micro-mhos per centimeter.
I - The lower value for the two columns has been reported due to obvious interference.
ND - Not detected.
NI - Not ignitable.
NA - Sample not analyzed for the listed analyte.
NS - No MassDEP standards exist for this analyte.
P - The relative percent difference (RPD) between the results for the two columns exceeds the method-specified criteria.
U - Analyte was not detected at specified quantitation limit.
Values in **bold** indicate the analyte was detected.
VOCs - Volatile Organic Compounds.
SVOCs - Semivolatile Organic Compounds.
PCBs - Polychlorinated Biphenyls.
TPH - Total Petroleum Hydrocarbons.
RC - Reportable concentration.
(1) - MassDEP RC for C9-C10 aromatics used.
(2) - Criteria applicable to xylene (total), the sum of the xylene isomers.
(3) - MassDEP RC for Dichloropropane used.
(4) - MassDEP RC for Dichloropropene used.
(5) - MassDEP RC for Chlorotoluene used.
* - Reuse and Disposal of Contaminated Soil at Massachusetts Landfills, MassDEP Policy # COMM-97-001, August 1997.

Table 2 - Soil Characterization Analytical Results
Washington Street - RTN 3-34742
Somerville, Massachusetts

Sample Location: Sample Name: Lab Sample ID: Sample Date:						GLC-YL21-VAC-121420-DC				GLC-VMF(20)-RCS-2-FILL(29)-DC			
						GLC-YL21-VAC-121420-DC-COMP		GLC-YL21-VAC-121420-DC-VOC-2		GLC-VMF(20)-RCS-2-FILL(29)-DC-COMP		GLC-VMF(20)-RCS-2-FILL(29)-DC-VOC-5	
						L2056554-03		L2056554-04		L2101324-01		L2101324-02	
						12/14/2020		12/14/2020		1/11/2021		1/11/2021	
Analysis	Analyte	Units	RCS-1	MA Unlined Landfill*	MA Lined Landfill*								
VOCs													
	Methylene chloride	mg/kg	0.1	NS	NS	NA		0.0032	U	NA		0.0039	U
	1,1-Dichloroethane	mg/kg	0.4	NS	NS	NA		0.00065	U	NA		0.00078	U
	Chloroform	mg/kg	0.2	NS	NS	NA		0.00097	U	NA		0.0012	U
	Carbon tetrachloride	mg/kg	5	NS	NS	NA		0.00065	U	NA		0.00078	U
	1,2-Dichloropropane	mg/kg	0.1	NS	NS	NA		0.00065	U	NA		0.00078	U
	Dibromochloromethane	mg/kg	0.005	NS	NS	NA		0.00065	U	NA		0.00078	U
	1,1,2-Trichloroethane	mg/kg	0.1	NS	NS	NA		0.00065	U	NA		0.00078	U
	Tetrachloroethene	mg/kg	1	NS	NS	NA		0.012		NA		0.00049	
	Chlorobenzene	mg/kg	1	NS	NS	NA		0.00032	U	NA		0.00039	U
	Trichlorofluoromethane	mg/kg	1,000	NS	NS	NA		0.0026	U	NA		0.0031	U
	1,2-Dichloroethane	mg/kg	0.1	NS	NS	NA		0.00065	U	NA		0.00078	U
	1,1,1-Trichloroethane	mg/kg	30	NS	NS	NA		0.00032	U	NA		0.00039	U
	Bromodichloromethane	mg/kg	0.1	NS	NS	NA		0.00032	U	NA		0.00039	U
	trans-1,3-Dichloropropene	mg/kg	0.01	NS	NS	NA		0.00065	U	NA		0.00078	U
	cis-1,3-Dichloropropene	mg/kg	0.01	NS	NS	NA		0.00032	U	NA		0.00039	U
	1,3-Dichloropropene, Total	mg/kg	0.01	NS	NS	NA		0.00032	U	NA		0.00039	U
	1,1-Dichloropropene	mg/kg	0.01(4)	NS	NS	NA		0.00032	U	NA		0.00039	U
	Bromoform	mg/kg	0.1	NS	NS	NA		0.0026	U	NA		0.0031	U
	1,1,2,2-Tetrachloroethane	mg/kg	0.005	NS	NS	NA		0.00032	U	NA		0.00039	U
	Benzene	mg/kg	2	NS	NS	NA		0.00032	U	NA		0.00039	U
	Toluene	mg/kg	30	NS	NS	NA		0.00065	U	NA		0.00079	
	Ethylbenzene	mg/kg	40	NS	NS	NA		0.00065	U	NA		0.00078	U
	Chloromethane	mg/kg	100	NS	NS	NA		0.0026	U	NA		0.0031	U
	Bromomethane	mg/kg	0.5	NS	NS	NA		0.0013	U	NA		0.0016	U
	Vinyl chloride	mg/kg	0.7	NS	NS	NA		0.00065	U	NA		0.00078	U
	Chloroethane	mg/kg	100	NS	NS	NA		0.0013	U	NA		0.0016	U
	1,1-Dichloroethene	mg/kg	3	NS	NS	NA		0.00065	U	NA		0.00078	U
	trans-1,2-Dichloroethene	mg/kg	1	NS	NS	NA		0.00097	U	NA		0.0012	U
	Trichloroethene	mg/kg	0.3	NS	NS	NA		0.0015		NA		0.00039	U
	1,2-Dichlorobenzene	mg/kg	9	NS	NS	NA		0.0013	U	NA		0.0016	U
	1,3-Dichlorobenzene	mg/kg	3	NS	NS	NA		0.0013	U	NA		0.0016	U
	1,4-Dichlorobenzene	mg/kg	0.7	NS	NS	NA		0.0013	U	NA		0.0016	U
	Methyl tert butyl ether	mg/kg	0.1	NS	NS	NA		0.0013	U	NA		0.0016	U
	p/m-Xylene	mg/kg	100(2)	NS	NS	NA		0.0013	U	NA		0.0016	U
	o-Xylene	mg/kg	100(2)	NS	NS	NA		0.00065	U	NA		0.00078	U
	Xylenes, Total	mg/kg	100	NS	NS	NA		0.00065	U	NA		0.00078	U
	cis-1,2-Dichloroethene	mg/kg	0.1	NS	NS	NA		0.0016		NA		0.00078	U
	1,2-Dichloroethene, Total	mg/kg	0.3	NS	NS	NA		0.0016		NA		0.00078	U
	Dibromomethane	mg/kg	500	NS	NS	NA		0.0013	U	NA		0.0016	U
	1,2,3-Trichloropropane	mg/kg	100	NS	NS	NA		0.0013	U	NA		0.0016	U
	Styrene	mg/kg	3	NS	NS	NA		0.00065	U	NA		0.00078	U
	Dichlorodifluoromethane	mg/kg	1,000	NS	NS	NA		0.0065	U	NA		0.0078	U
	Acetone	mg/kg	6	NS	NS	NA		0.021		NA		0.022	
	Carbon disulfide	mg/kg	100	NS	NS	NA		0.0065	U	NA		0.0078	U
	Methyl ethyl ketone	mg/kg	4	NS	NS	NA		0.0065	U	NA		0.0078	U
	Methyl isobutyl ketone	mg/kg	0.4	NS	NS	NA		0.0065	U	NA		0.0078	U
	2-Hexanone	mg/kg	100	NS	NS	NA		0.0065	U	NA		0.0078	U
	Bromochloromethane	mg/kg	NS	NS	NS	NA		0.0013	U	NA		0.0016	U
	Tetrahydrofuran	mg/kg	500	NS	NS	NA		0.0026	U	NA		0.0031	U
	2,2-Dichloropropane	mg/kg	0.1(3)	NS	NS	NA		0.0013	U	NA		0.0016	U
	1,2-Dibromoethane	mg/kg	0.1	NS	NS	NA		0.00065	U	NA		0.00078	U
	1,3-Dichloropropane	mg/kg	500	NS	NS	NA		0.0013	U	NA		0.0016	U
	1,1,1,2-Tetrachloroethane	mg/kg	0.1	NS	NS	NA		0.00032	U	NA		0.00039	U
	Bromobenzene	mg/kg	100	NS	NS	NA		0.0013	U	NA		0.0016	U
	n-Butylbenzene	mg/kg	100(1)	NS	NS	NA		0.00065	U	NA		0.00078	U
	sec-Butylbenzene	mg/kg	100(1)	NS	NS	NA		0.00065	U	NA		0.00078	U
	tert-Butylbenzene	mg/kg	100	NS	NS	NA		0.0013	U	NA		0.0016	U
	o-Chlorotoluene	mg/kg	100	NS	NS	NA		0.0013	U	NA		0.0016	U
	p-Chlorotoluene	mg/kg	100(5)	NS	NS	NA		0.0013	U	NA		0.0016	U

Table 2 - Soil Characterization Analytical Results
Washington Street - RTN 3-34742
Somerville, Massachusetts

Sample Location: Sample Name: Lab Sample ID: Sample Date:						GLC-YL21-VAC-121420-DC				GLC-VMF(20)-RCS-2-FILL(29)-DC			
						GLC-YL21-VAC-121420-DC-COMP		GLC-YL21-VAC-121420-DC-VOC-2		GLC-VMF(20)-RCS-2-FILL(29)-DC-COMP		GLC-VMF(20)-RCS-2-FILL(29)-DC-VOC-5	
						L2056554-03		L2056554-04		L2101324-01		L2101324-02	
						12/14/2020		12/14/2020		1/11/2021		1/11/2021	
Analysis	Analyte	Units	RCS-1	MA Unlined Landfill*	MA Lined Landfill*								
	1,2-Dibromo-3-chloropropane	mg/kg	10	NS	NS	NA		0.0019	U	NA		0.0023	U
	Hexachlorobutadiene	mg/kg	30	NS	NS	NA		0.0026	U	NA		0.0031	U
	Isopropylbenzene	mg/kg	1,000	NS	NS	NA		0.00065	U	NA		0.00078	U
	p-Isopropyltoluene	mg/kg	100	NS	NS	NA		0.00065	U	NA		0.00078	U
	Naphthalene	mg/kg	4	NS	NS	NA		0.0026	U	NA		0.0031	U
	n-Propylbenzene	mg/kg	100	NS	NS	NA		0.00065	U	NA		0.00078	U
	1,2,3-Trichlorobenzene	mg/kg	NS	NS	NS	NA		0.0013	U	NA		0.0016	U
	1,2,4-Trichlorobenzene	mg/kg	2	NS	NS	NA		0.0013	U	NA		0.0016	U
	1,3,5-Trimethylbenzene	mg/kg	10	NS	NS	NA		0.0013	U	NA		0.0016	U
	1,2,4-Trimethylbenzene	mg/kg	1,000	NS	NS	NA		0.0013	U	NA		0.0016	U
	Diethyl ether	mg/kg	100	NS	NS	NA		0.0013	U	NA		0.0016	U
	Diisopropyl Ether	mg/kg	100	NS	NS	NA		0.0013	U	NA		0.0016	U
	Ethyl-Tert-Butyl-Ether	mg/kg	NS	NS	NS	NA		0.0013	U	NA		0.0016	U
	Tertiary-Amyl Methyl Ether	mg/kg	NS	NS	NS	NA		0.0013	U	NA		0.0016	U
	1,4-Dioxane	mg/kg	0.2	NS	NS	NA		0.052	U	NA		0.062	U
	Total VOCs	mg/kg	NS	4	10	NA		0.0361		NA		0.02328	
SVOCs													
	Acenaphthene	mg/kg	4	NS	NS	0.14	U	NA		0.14	U	NA	
	1,2,4-Trichlorobenzene	mg/kg	2	NS	NS	0.18	U	NA		0.18	U	NA	
	Hexachlorobenzene	mg/kg	0.7	NS	NS	0.075	U	NA		0.074	U	NA	
	Bis(2-chloroethyl)ether	mg/kg	0.7	NS	NS	0.075	U	NA		0.074	U	NA	
	2-Chloronaphthalene	mg/kg	1,000	NS	NS	0.18	U	NA		0.18	U	NA	
	1,2-Dichlorobenzene	mg/kg	9	NS	NS	0.18	U	NA		0.18	U	NA	
	1,3-Dichlorobenzene	mg/kg	3	NS	NS	0.18	U	NA		0.18	U	NA	
	1,4-Dichlorobenzene	mg/kg	0.7	NS	NS	0.075	U	NA		0.074	U	NA	
	3,3'-Dichlorobenzidine	mg/kg	3	NS	NS	0.18	U	NA		0.18	U	NA	
	2,4-Dinitrotoluene	mg/kg	0.7	NS	NS	0.075	U	NA		0.074	U	NA	
	2,6-Dinitrotoluene	mg/kg	100	NS	NS	0.18	U	NA		0.18	U	NA	
	Azobenzene	mg/kg	50	NS	NS	0.18	U	NA		0.18	U	NA	
	Fluoranthene	mg/kg	1,000	NS	NS	1.2		NA		0.29		NA	
	4-Bromophenyl phenyl ether	mg/kg	100	NS	NS	0.18	U	NA		0.18	U	NA	
	Bis(2-chloroisopropyl)ether	mg/kg	0.7	NS	NS	0.075	U	NA		0.074	U	NA	
	Bis(2-chloroethoxy)methane	mg/kg	500	NS	NS	0.19	U	NA		0.19	U	NA	
	Hexachlorobutadiene	mg/kg	30	NS	NS	0.18	U	NA		0.18	U	NA	
	Hexachloroethane	mg/kg	0.7	NS	NS	0.075	U	NA		0.074	U	NA	
	Isophorone	mg/kg	100	NS	NS	0.16	U	NA		0.16	U	NA	
	Naphthalene	mg/kg	4	NS	NS	0.18	U	NA		0.18	U	NA	
	Nitrobenzene	mg/kg	500	NS	NS	0.16	U	NA		0.16	U	NA	
	Bis(2-ethylhexyl)phthalate	mg/kg	90	NS	NS	0.29		NA		0.18	U	NA	
	Butyl benzyl phthalate	mg/kg	100	NS	NS	0.18	U	NA		0.18	U	NA	
	Di-n-butylphthalate	mg/kg	50	NS	NS	0.18	U	NA		0.18	U	NA	
	Di-n-octylphthalate	mg/kg	1,000	NS	NS	0.18	U	NA		0.18	U	NA	
	Diethyl phthalate	mg/kg	10	NS	NS	0.18	U	NA		0.18	U	NA	
	Dimethyl phthalate	mg/kg	0.7	NS	NS	0.075	U	NA		0.074	U	NA	
	Benzo(a)anthracene	mg/kg	7	NS	NS	0.54		NA		0.16		NA	
	Benzo(a)pyrene	mg/kg	2	NS	NS	0.56		NA		0.14	U	NA	
	Benzo(b)fluoranthene	mg/kg	7	NS	NS	0.74		NA		0.15		NA	
	Benzo(k)fluoranthene	mg/kg	70	NS	NS	0.24		NA		0.1	U	NA	
	Chrysene	mg/kg	70	NS	NS	0.6		NA		0.15		NA	
	Acenaphthylene	mg/kg	1	NS	NS	0.14	U	NA		0.14	U	NA	
	Anthracene	mg/kg	1,000	NS	NS	0.16		NA		0.1	U	NA	
	Benzo(ghi)perylene	mg/kg	1,000	NS	NS	0.35		NA		0.14	U	NA	
	Fluorene	mg/kg	1,000	NS	NS	0.18	U	NA		0.18	U	NA	
	Phenanthrene	mg/kg	10	NS	NS	0.68		NA		0.22		NA	
	Dibenzo(a,h)anthracene	mg/kg	0.7	NS	NS	0.084		NA		0.074	U	NA	
	Indeno(1,2,3-cd)pyrene	mg/kg	7	NS	NS	0.38		NA		0.14	U	NA	
	Pyrene	mg/kg	1,000	NS	NS	1		NA		0.26		NA	
	Aniline	mg/kg	1,000	NS	NS	0.22	U	NA		0.21	U	NA	
	4-Chloroaniline	mg/kg	1	NS	NS	0.18	U	NA		0.18	U	NA	
	Dibenzofuran	mg/kg	100	NS	NS	0.18	U	NA		0.18	U	NA	
	2-Methylnaphthalene	mg/kg	0.7	NS	NS	0.075	U	NA		0.074	U	NA	

Table 2 - Soil Characterization Analytical Results
Washington Street - RTN 3-34742
Somerville, Massachusetts

Sample Location: Sample Name: Lab Sample ID: Sample Date:						GLC-YL21-VAC-121420-DC				GLC-VMF(20)-RCS-2-FILL(29)-DC			
						GLC-YL21-VAC-121420-DC-COMP		GLC-YL21-VAC-121420-DC-VOC-2		GLC-VMF(20)-RCS-2-FILL(29)-DC-COMP		GLC-VMF(20)-RCS-2-FILL(29)-DC-VOC-5	
						L2056554-03		L2056554-04		L2101324-01		L2101324-02	
						12/14/2020		12/14/2020		1/11/2021		1/11/2021	
Analysis	Analyte	Units	RCS-1	MA Unlined Landfill*	MA Lined Landfill*								
	Acetophenone	mg/kg	1,000	NS	NS	0.18	U	NA		0.18	U	NA	
	2,4,6-Trichlorophenol	mg/kg	0.7	NS	NS	0.075	U	NA		0.074	U	NA	
	2-Chlorophenol	mg/kg	0.7	NS	NS	0.075	U	NA		0.074	U	NA	
	2,4-Dichlorophenol	mg/kg	0.7	NS	NS	0.075	U	NA		0.074	U	NA	
	2,4-Dimethylphenol	mg/kg	0.7	NS	NS	0.075	U	NA		0.074	U	NA	
	2-Nitrophenol	mg/kg	100	NS	NS	0.39	U	NA		0.38	U	NA	
	4-Nitrophenol	mg/kg	100	NS	NS	0.25	U	NA		0.25	U	NA	
	2,4-Dinitrophenol	mg/kg	3	NS	NS	0.86	U	NA		0.85	U	NA	
	Pentachlorophenol	mg/kg	3	NS	NS	0.36	U	NA		0.35	U	NA	
	Phenol	mg/kg	1	NS	NS	0.18	U	NA		0.18	U	NA	
	2-Methylphenol	mg/kg	500	NS	NS	0.18	U	NA		0.18	U	NA	
	3-Methylphenol/4-Methylphenol	mg/kg	500	NS	NS	0.26	U	NA		0.25	U	NA	
	2,4,5-Trichlorophenol	mg/kg	4	NS	NS	0.18	U	NA		0.18	U	NA	
	Pyridine	mg/kg	500	NS	NS	0.19	U	NA		0.19	U	NA	
	Total SVOCs	mg/kg	NS	100	100	6.824		NA		1.23		NA	
PCBs													
	Aroclor 1016	mg/kg	1	NS	NS	0.0368	U	NA		0.0352	U	NA	
	Aroclor 1221	mg/kg	1	NS	NS	0.0368	U	NA		0.0352	U	NA	
	Aroclor 1232	mg/kg	1	NS	NS	0.0368	U	NA		0.0352	U	NA	
	Aroclor 1242	mg/kg	1	NS	NS	0.0368	U	NA		0.0352	U	NA	
	Aroclor 1248	mg/kg	1	NS	NS	0.0368	U	NA		0.0352	U	NA	
	Aroclor 1254	mg/kg	1	NS	NS	0.0368	U	NA		0.0748		NA	
	Aroclor 1260	mg/kg	1	NS	NS	0.0368	U	NA		0.0352	U	NA	
	Aroclor 1262	mg/kg	1	NS	NS	0.0368	U	NA		0.0352	U	NA	
	Aroclor 1268	mg/kg	1	NS	NS	0.0368	U	NA		0.0352	U	NA	
	PCBs, Total	mg/kg	1	2	2	0.0368	U	NA		0.0748		NA	
Pesticides													
	Delta-BHC	mg/kg	10	NS	NS	0.00175	U	NA		0.00161	U	NA	
	Lindane	mg/kg	0.003	NS	NS	0.000582	U	NA		0.000537	U	NA	
	Alpha-BHC	mg/kg	50	NS	NS	0.000728	U	NA		0.000672	U	NA	
	Beta-BHC	mg/kg	10	NS	NS	0.00175	U	NA		0.00161	U	NA	
	Heptachlor	mg/kg	0.3	NS	NS	0.000873	U	NA		0.000806	U	NA	
	Aldrin	mg/kg	0.08	NS	NS	0.00175	U	NA		0.00161	U	NA	
	Heptachlor epoxide	mg/kg	0.1	NS	NS	0.00327	U	NA		0.00302	U	NA	
	Endrin	mg/kg	10	NS	NS	0.000728	U	NA		0.000672	U	NA	
	Endrin ketone	mg/kg	NS	NS	NS	0.00175	U	NA		0.00161	U	NA	
	Dieldrin	mg/kg	0.08	NS	NS	0.00109	U	NA		0.00101	U	NA	
	4,4'-DDE	mg/kg	6	NS	NS	0.00175	U	NA		0.00265		NA	
	4,4'-DDD	mg/kg	8	NS	NS	0.00299	P	NA		0.0025		NA	
	4,4'-DDT	mg/kg	6	NS	NS	0.00328	P	NA		0.0103	IP	NA	
	Endosulfan I	mg/kg	0.5	NS	NS	0.00175	U	NA		0.00161	U	NA	
	Endosulfan II	mg/kg	0.5	NS	NS	0.00175	U	NA		0.00161	U	NA	
	Endosulfan sulfate	mg/kg	NS	NS	NS	0.000728	U	NA		0.000672	U	NA	
	Methoxychlor	mg/kg	200	NS	NS	0.00327	U	NA		0.00302	U	NA	
	Chlordane	mg/kg	0.7	NS	NS	0.0146	U	NA		0.0134	U	NA	
	Hexachlorobenzene	mg/kg	0.7	NS	NS	0.00175	U	NA		0.00161	U	NA	
Herbicides													
	MCP	mg/kg	NS	NS	NS	3.7	U	NA		3.5	U	NA	
	MCPA	mg/kg	100	NS	NS	3.7	U	NA		3.5	U	NA	
	Dalapon	mg/kg	1,000	NS	NS	0.037	U	NA		0.035	U	NA	
	Dicamba	mg/kg	500	NS	NS	0.037	U	NA		0.035	U	NA	
	Dichloroprop	mg/kg	NS	NS	NS	0.037	U	NA		0.035	U	NA	
	2,4-D	mg/kg	100	NS	NS	0.037	U	NA		0.035	U	NA	
	2,4-DB	mg/kg	100	NS	NS	0.037	U	NA		0.035	U	NA	
	2,4,5-T	mg/kg	100	NS	NS	0.037	U	NA		0.035	U	NA	
	2,4,5-TP (Silvex)	mg/kg	100	NS	NS	0.037	U	NA		0.035	U	NA	

Table 2 - Soil Characterization Analytical Results
Washington Street - RTN 3-34742
Somerville, Massachusetts

Sample Location: Sample Name: Lab Sample ID: Sample Date:						GLC-YL21-VAC-121420-DC				GLC-VMF(20)-RCS-2-FILL(29)-DC			
						GLC-YL21-VAC-121420-DC-COMP		GLC-YL21-VAC-121420-DC-VOC-2		GLC-VMF(20)-RCS-2-FILL(29)-DC-COMP		GLC-VMF(20)-RCS-2-FILL(29)-DC-VOC-5	
						L2056554-03		L2056554-04		L2101324-01		L2101324-02	
						12/14/2020		12/14/2020		1/11/2021		1/11/2021	
Analysis	Analyte	Units	RCS-1	MA Unlined Landfill*	MA Lined Landfill*								
TPH													
	TPH (C10-C36)	mg/kg	1,000	2,500	5,000	164		NA		48		NA	
Metals, total													
	Antimony	mg/kg	20	NS	NS	2.14	U	NA		2.07	U	NA	
	Arsenic	mg/kg	20	40	40	4.2		NA		5.32		NA	
	Barium	mg/kg	1,000	NS	NS	26.8		NA		28		NA	
	Beryllium	mg/kg	90	NS	NS	0.214	U	NA		0.249		NA	
	Cadmium	mg/kg	70	30	80	0.582		NA		0.431		NA	
	Chromium	mg/kg	100	1,000	1,000	22.4		NA		11		NA	
	Lead	mg/kg	200	1,000	2,000	40		NA		20.3		NA	
	Mercury	mg/kg	20	10	10	0.077	U	NA		0.079	U	NA	
	Nickel	mg/kg	600	NS	NS	12.4		NA		9.76		NA	
	Selenium	mg/kg	400	NS	NS	2.14	U	NA		2.07	U	NA	
	Silver	mg/kg	100	NS	NS	0.428	U	NA		0.415	U	NA	
	Thallium	mg/kg	8	NS	NS	2.14	U	NA		2.07	U	NA	
	Vanadium	mg/kg	400	NS	NS	35.1		NA		21.1		NA	
	Zinc	mg/kg	1,000	NS	NS	60.9		NA		38.6		NA	
General Chemistry													
	Specific Conductance	umhos/cm	NS	4,000	8,000	58		NA		78		NA	
	pH	SU	NS	NS	NS	8.4		NA		8.6		NA	
	Cyanide, Reactive	mg/kg	NS	NS	NS	10	U	NA		10	U	NA	
	Sulfide, Reactive	mg/kg	NS	NS	NS	10	U	NA		10	U	NA	
	Ignitability		NS	NS	NS	NI		NA		NI		NA	

Notes:
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
su - Standard unit.
umhos/cm - Micro-mhos per centimeter.
I - The lower value for the two columns has been reported due to obvious interference.
ND - Not detected.
NI - Not ignitable.
NA - Sample not analyzed for the listed analyte.
NS - No MassDEP standards exist for this analyte.
P - The relative percent difference (RPD) between the results for the two columns exceeds the method-specified criteria.
U - Analyte was not detected at specified quantitation limit.
Values in **bold** indicate the analyte was detected.
VOCs - Volatile Organic Compounds.
SVOCs - Semivolatile Organic Compounds.
PCBs - Polychlorinated Biphenyls.
TPH - Total Petroleum Hydrocarbons.
RC - Reportable concentration.
(1) - MassDEP RC for C9-C10 aromatics used.
(2) - Criteria applicable to xylene (total), the sum of the xylene isomers.
(3) - MassDEP RC for Dichloropropane used.
(4) - MassDEP RC for Dichloropropene used.
(5) - MassDEP RC for Chlorotoluene used.
* - Reuse and Disposal of Contaminated Soil at Massachusetts Landfills, MassDEP Policy # COMM-97-001, August 1997.

Table 2 - Soil Characterization Analytical Results
Washington Street - RTN 3-34742
Somerville, Massachusetts

Sample Location: Sample Name: Lab Sample ID: Sample Date:						GLC-VMF(20)-RCS-2-FILL(30)- DC				GLC-VMF(48)-RCS-2-FILL(21)- DC			
						GLC-VMF(20)- RCS-2-FILL(30)- DC-COMP		GLC-VMF(20)- RCS-2-FILL(30)- DC-VOC-4		GLC-VMF(48)- RCS-2-FILL(21)- DC-COMP		GLC-VMF(48)- RCS-2-FILL(21)- DC-VOC-7	
						L2101324-03		L2101324-04		L2101324-09		L2101324-10	
						1/11/2021		1/11/2021		1/11/2021		1/11/2021	
Analysis	Analyte	Units	RCS-1	MA Unlined Landfill*	MA Lined Landfill*								
VOCs													
	Methylene chloride	mg/kg	0.1	NS	NS	NA		0.0037	U	NA		0.0038	U
	1,1-Dichloroethane	mg/kg	0.4	NS	NS	NA		0.00075	U	NA		0.00076	U
	Chloroform	mg/kg	0.2	NS	NS	NA		0.0011	U	NA		0.0011	U
	Carbon tetrachloride	mg/kg	5	NS	NS	NA		0.00075	U	NA		0.00076	U
	1,2-Dichloropropane	mg/kg	0.1	NS	NS	NA		0.00075	U	NA		0.00076	U
	Dibromochloromethane	mg/kg	0.005	NS	NS	NA		0.00075	U	NA		0.00076	U
	1,1,2-Trichloroethane	mg/kg	0.1	NS	NS	NA		0.00075	U	NA		0.00076	U
	Tetrachloroethene	mg/kg	1	NS	NS	NA		0.00087		NA		0.00067	
	Chlorobenzene	mg/kg	1	NS	NS	NA		0.00037	U	NA		0.00038	U
	Trichlorofluoromethane	mg/kg	1,000	NS	NS	NA		0.003	U	NA		0.003	U
	1,2-Dichloroethane	mg/kg	0.1	NS	NS	NA		0.00075	U	NA		0.00076	U
	1,1,1-Trichloroethane	mg/kg	30	NS	NS	NA		0.00037	U	NA		0.00038	U
	Bromodichloromethane	mg/kg	0.1	NS	NS	NA		0.00037	U	NA		0.00038	U
	trans-1,3-Dichloropropene	mg/kg	0.01	NS	NS	NA		0.00075	U	NA		0.00076	U
	cis-1,3-Dichloropropene	mg/kg	0.01	NS	NS	NA		0.00037	U	NA		0.00038	U
	1,3-Dichloropropene, Total	mg/kg	0.01	NS	NS	NA		0.00037	U	NA		0.00038	U
	1,1-Dichloropropene	mg/kg	0.01(4)	NS	NS	NA		0.00037	U	NA		0.00038	U
	Bromoform	mg/kg	0.1	NS	NS	NA		0.003	U	NA		0.003	U
	1,1,2,2-Tetrachloroethane	mg/kg	0.005	NS	NS	NA		0.00037	U	NA		0.00038	U
	Benzene	mg/kg	2	NS	NS	NA		0.00037	U	NA		0.00038	U
	Toluene	mg/kg	30	NS	NS	NA		0.00089		NA		0.00076	U
	Ethylbenzene	mg/kg	40	NS	NS	NA		0.00075	U	NA		0.00076	U
	Chloromethane	mg/kg	100	NS	NS	NA		0.003	U	NA		0.003	U
	Bromomethane	mg/kg	0.5	NS	NS	NA		0.0015	U	NA		0.0015	U
	Vinyl chloride	mg/kg	0.7	NS	NS	NA		0.00075	U	NA		0.00076	U
	Chloroethane	mg/kg	100	NS	NS	NA		0.0015	U	NA		0.0015	U
	1,1-Dichloroethene	mg/kg	3	NS	NS	NA		0.00075	U	NA		0.00076	U
	trans-1,2-Dichloroethene	mg/kg	1	NS	NS	NA		0.0011	U	NA		0.0011	U
	Trichloroethene	mg/kg	0.3	NS	NS	NA		0.00037	U	NA		0.00038	U
	1,2-Dichlorobenzene	mg/kg	9	NS	NS	NA		0.0015	U	NA		0.0015	U
	1,3-Dichlorobenzene	mg/kg	3	NS	NS	NA		0.0015	U	NA		0.0015	U
	1,4-Dichlorobenzene	mg/kg	0.7	NS	NS	NA		0.0015	U	NA		0.0015	U
	Methyl tert butyl ether	mg/kg	0.1	NS	NS	NA		0.0015	U	NA		0.0015	U
	p/m-Xylene	mg/kg	100(2)	NS	NS	NA		0.0015	U	NA		0.0015	U
	o-Xylene	mg/kg	100(2)	NS	NS	NA		0.00075	U	NA		0.00076	U
	Xylenes, Total	mg/kg	100	NS	NS	NA		0.00075	U	NA		0.00076	U
	cis-1,2-Dichloroethene	mg/kg	0.1	NS	NS	NA		0.00075	U	NA		0.00076	U
	1,2-Dichloroethene, Total	mg/kg	0.3	NS	NS	NA		0.00075	U	NA		0.00076	U
	Dibromomethane	mg/kg	500	NS	NS	NA		0.0015	U	NA		0.0015	U
	1,2,3-Trichloropropane	mg/kg	100	NS	NS	NA		0.0015	U	NA		0.0015	U
	Styrene	mg/kg	3	NS	NS	NA		0.00075	U	NA		0.00076	U
	Dichlorodifluoromethane	mg/kg	1,000	NS	NS	NA		0.0075	U	NA		0.0076	U
	Acetone	mg/kg	6	NS	NS	NA		0.045		NA		0.019	U
	Carbon disulfide	mg/kg	100	NS	NS	NA		0.0075	U	NA		0.0076	U
	Methyl ethyl ketone	mg/kg	4	NS	NS	NA		0.0075	U	NA		0.0076	U
	Methyl isobutyl ketone	mg/kg	0.4	NS	NS	NA		0.0075	U	NA		0.0076	U
	2-Hexanone	mg/kg	100	NS	NS	NA		0.0075	U	NA		0.0076	U
	Bromochloromethane	mg/kg	NS	NS	NS	NA		0.0015	U	NA		0.0015	U
	Tetrahydrofuran	mg/kg	500	NS	NS	NA		0.003	U	NA		0.003	U
	2,2-Dichloropropane	mg/kg	0.1(3)	NS	NS	NA		0.0015	U	NA		0.0015	U
	1,2-Dibromoethane	mg/kg	0.1	NS	NS	NA		0.00075	U	NA		0.00076	U
	1,3-Dichloropropane	mg/kg	500	NS	NS	NA		0.0015	U	NA		0.0015	U
	1,1,1,2-Tetrachloroethane	mg/kg	0.1	NS	NS	NA		0.00037	U	NA		0.00038	U
	Bromobenzene	mg/kg	100	NS	NS	NA		0.0015	U	NA		0.0015	U
	n-Butylbenzene	mg/kg	100(1)	NS	NS	NA		0.00075	U	NA		0.00076	U
	sec-Butylbenzene	mg/kg	100(1)	NS	NS	NA		0.00075	U	NA		0.00076	U
	tert-Butylbenzene	mg/kg	100	NS	NS	NA		0.0015	U	NA		0.0015	U
	o-Chlorotoluene	mg/kg	100	NS	NS	NA		0.0015	U	NA		0.0015	U
	p-Chlorotoluene	mg/kg	100(5)	NS	NS	NA		0.0015	U	NA		0.0015	U

Table 2 - Soil Characterization Analytical Results
Washington Street - RTN 3-34742
Somerville, Massachusetts

Sample Location: Sample Name: Lab Sample ID: Sample Date:						GLC-VMF(20)-RCS-2-FILL(30)- DC				GLC-VMF(48)-RCS-2-FILL(21)- DC			
						GLC-VMF(20)- RCS-2-FILL(30)- DC-COMP		GLC-VMF(20)- RCS-2-FILL(30)- DC-VOC-4		GLC-VMF(48)- RCS-2-FILL(21)- DC-COMP		GLC-VMF(48)- RCS-2-FILL(21)- DC-VOC-7	
						L2101324-03		L2101324-04		L2101324-09		L2101324-10	
						1/11/2021		1/11/2021		1/11/2021		1/11/2021	
Analysis	Analyte	Units	RCS-1	MA Unlined Landfill*	MA Lined Landfill*								
	1,2-Dibromo-3-chloropropane	mg/kg	10	NS	NS	NA		0.0022	U	NA		0.0023	U
	Hexachlorobutadiene	mg/kg	30	NS	NS	NA		0.003	U	NA		0.003	U
	Isopropylbenzene	mg/kg	1,000	NS	NS	NA		0.00075	U	NA		0.00076	U
	p-Isopropyltoluene	mg/kg	100	NS	NS	NA		0.00075	U	NA		0.00076	U
	Naphthalene	mg/kg	4	NS	NS	NA		0.003	U	NA		0.003	U
	n-Propylbenzene	mg/kg	100	NS	NS	NA		0.00075	U	NA		0.00076	U
	1,2,3-Trichlorobenzene	mg/kg	NS	NS	NS	NA		0.0015	U	NA		0.0015	U
	1,2,4-Trichlorobenzene	mg/kg	2	NS	NS	NA		0.0015	U	NA		0.0015	U
	1,3,5-Trimethylbenzene	mg/kg	10	NS	NS	NA		0.0015	U	NA		0.0015	U
	1,2,4-Trimethylbenzene	mg/kg	1,000	NS	NS	NA		0.0015	U	NA		0.0015	U
	Diethyl ether	mg/kg	100	NS	NS	NA		0.0015	U	NA		0.0015	U
	Diisopropyl Ether	mg/kg	100	NS	NS	NA		0.0015	U	NA		0.0015	U
	Ethyl-Tert-Butyl-Ether	mg/kg	NS	NS	NS	NA		0.0015	U	NA		0.0015	U
	Tertiary-Amyl Methyl Ether	mg/kg	NS	NS	NS	NA		0.0015	U	NA		0.0015	U
	1,4-Dioxane	mg/kg	0.2	NS	NS	NA		0.06	U	NA		0.061	U
	Total VOCs	mg/kg	NS	4	10	NA		0.04676		NA		0.00067	
SVOCs													
	Acenaphthene	mg/kg	4	NS	NS	0.14	U	NA		0.14	U	NA	
	1,2,4-Trichlorobenzene	mg/kg	2	NS	NS	0.18	U	NA		0.17	U	NA	
	Hexachlorobenzene	mg/kg	0.7	NS	NS	0.074	U	NA		0.072	U	NA	
	Bis(2-chloroethyl)ether	mg/kg	0.7	NS	NS	0.074	U	NA		0.072	U	NA	
	2-Chloronaphthalene	mg/kg	1,000	NS	NS	0.18	U	NA		0.17	U	NA	
	1,2-Dichlorobenzene	mg/kg	9	NS	NS	0.18	U	NA		0.17	U	NA	
	1,3-Dichlorobenzene	mg/kg	3	NS	NS	0.18	U	NA		0.17	U	NA	
	1,4-Dichlorobenzene	mg/kg	0.7	NS	NS	0.074	U	NA		0.072	U	NA	
	3,3'-Dichlorobenzidine	mg/kg	3	NS	NS	0.18	U	NA		0.17	U	NA	
	2,4-Dinitrotoluene	mg/kg	0.7	NS	NS	0.074	U	NA		0.072	U	NA	
	2,6-Dinitrotoluene	mg/kg	100	NS	NS	0.18	U	NA		0.17	U	NA	
	Azobenzene	mg/kg	50	NS	NS	0.18	U	NA		0.17	U	NA	
	Fluoranthene	mg/kg	1,000	NS	NS	0.66		NA		0.87		NA	
	4-Bromophenyl phenyl ether	mg/kg	100	NS	NS	0.18	U	NA		0.17	U	NA	
	Bis(2-chloroisopropyl)ether	mg/kg	0.7	NS	NS	0.074	U	NA		0.072	U	NA	
	Bis(2-chloroethoxy)methane	mg/kg	500	NS	NS	0.19	U	NA		0.18	U	NA	
	Hexachlorobutadiene	mg/kg	30	NS	NS	0.18	U	NA		0.17	U	NA	
	Hexachloroethane	mg/kg	0.7	NS	NS	0.074	U	NA		0.072	U	NA	
	Isophorone	mg/kg	100	NS	NS	0.16	U	NA		0.15	U	NA	
	Naphthalene	mg/kg	4	NS	NS	0.18	U	NA		0.17	U	NA	
	Nitrobenzene	mg/kg	500	NS	NS	0.16	U	NA		0.15	U	NA	
	Bis(2-ethylhexyl)phthalate	mg/kg	90	NS	NS	0.18	U	NA		0.17	U	NA	
	Butyl benzyl phthalate	mg/kg	100	NS	NS	0.18	U	NA		0.17	U	NA	
	Di-n-butylphthalate	mg/kg	50	NS	NS	0.18	U	NA		0.17	U	NA	
	Di-n-octylphthalate	mg/kg	1,000	NS	NS	0.18	U	NA		0.17	U	NA	
	Diethyl phthalate	mg/kg	10	NS	NS	0.18	U	NA		0.17	U	NA	
	Dimethyl phthalate	mg/kg	0.7	NS	NS	0.074	U	NA		0.072	U	NA	
	Benzo(a)anthracene	mg/kg	7	NS	NS	0.38		NA		0.38		NA	
	Benzo(a)pyrene	mg/kg	2	NS	NS	0.28		NA		0.34		NA	
	Benzo(b)fluoranthene	mg/kg	7	NS	NS	0.37		NA		0.46		NA	
	Benzo(k)fluoranthene	mg/kg	70	NS	NS	0.13		NA		0.15		NA	
	Chrysene	mg/kg	70	NS	NS	0.34		NA		0.42		NA	
	Acenaphthylene	mg/kg	1	NS	NS	0.14	U	NA		0.14	U	NA	
	Anthracene	mg/kg	1,000	NS	NS	0.14		NA		0.25		NA	
	Benzo(ghi)perylene	mg/kg	1,000	NS	NS	0.14		NA		0.21		NA	
	Fluorene	mg/kg	1,000	NS	NS	0.18	U	NA		0.17	U	NA	
	Phenanthrene	mg/kg	10	NS	NS	0.57		NA		0.53		NA	
	Dibenzo(a,h)anthracene	mg/kg	0.7	NS	NS	0.074	U	NA		0.072	U	NA	
	Indeno(1,2,3-cd)pyrene	mg/kg	7	NS	NS	0.14		NA		0.21		NA	
	Pyrene	mg/kg	1,000	NS	NS	0.6		NA		0.73		NA	
	Aniline	mg/kg	1,000	NS	NS	0.21	U	NA		0.2	U	NA	
	4-Chloroaniline	mg/kg	1	NS	NS	0.18	U	NA		0.17	U	NA	
	Dibenzofuran	mg/kg	100	NS	NS	0.18	U	NA		0.17	U	NA	
	2-Methylnaphthalene	mg/kg	0.7	NS	NS	0.078		NA		0.11		NA	

Table 2 - Soil Characterization Analytical Results
Washington Street - RTN 3-34742
Somerville, Massachusetts

Sample Location: Sample Name: Lab Sample ID: Sample Date:						GLC-VMF(20)-RCS-2-FILL(30)- DC				GLC-VMF(48)-RCS-2-FILL(21)- DC			
						GLC-VMF(20)- RCS-2-FILL(30)- DC-COMP		GLC-VMF(20)- RCS-2-FILL(30)- DC-VOC-4		GLC-VMF(48)- RCS-2-FILL(21)- DC-COMP		GLC-VMF(48)- RCS-2-FILL(21)- DC-VOC-7	
						L2101324-03		L2101324-04		L2101324-09		L2101324-10	
						1/11/2021		1/11/2021		1/11/2021		1/11/2021	
Analysis	Analyte	Units	RCS-1	MA Unlined Landfill*	MA Lined Landfill*								
	Acetophenone	mg/kg	1,000	NS	NS	0.18	U	NA		0.17	U	NA	
	2,4,6-Trichlorophenol	mg/kg	0.7	NS	NS	0.074	U	NA		0.072	U	NA	
	2-Chlorophenol	mg/kg	0.7	NS	NS	0.074	U	NA		0.072	U	NA	
	2,4-Dichlorophenol	mg/kg	0.7	NS	NS	0.074	U	NA		0.072	U	NA	
	2,4-Dimethylphenol	mg/kg	0.7	NS	NS	0.074	U	NA		0.072	U	NA	
	2-Nitrophenol	mg/kg	100	NS	NS	0.38	U	NA		0.37	U	NA	
	4-Nitrophenol	mg/kg	100	NS	NS	0.24	U	NA		0.24	U	NA	
	2,4-Dinitrophenol	mg/kg	3	NS	NS	0.84	U	NA		0.82	U	NA	
	Pentachlorophenol	mg/kg	3	NS	NS	0.35	U	NA		0.34	U	NA	
	Phenol	mg/kg	1	NS	NS	0.18	U	NA		0.17	U	NA	
	2-Methylphenol	mg/kg	500	NS	NS	0.18	U	NA		0.17	U	NA	
	3-Methylphenol/4-Methylphenol	mg/kg	500	NS	NS	0.25	U	NA		0.25	U	NA	
	2,4,5-Trichlorophenol	mg/kg	4	NS	NS	0.18	U	NA		0.17	U	NA	
	Pyridine	mg/kg	500	NS	NS	0.19	U	NA		0.18	U	NA	
	Total SVOCs	mg/kg	NS	100	100	3.828		NA		4.66		NA	
PCBs													
	Aroclor 1016	mg/kg	1	NS	NS	0.0352	U	NA		0.0334	U	NA	
	Aroclor 1221	mg/kg	1	NS	NS	0.0352	U	NA		0.0334	U	NA	
	Aroclor 1232	mg/kg	1	NS	NS	0.0352	U	NA		0.0334	U	NA	
	Aroclor 1242	mg/kg	1	NS	NS	0.0352	U	NA		0.0334	U	NA	
	Aroclor 1248	mg/kg	1	NS	NS	0.0904		NA		0.0334	U	NA	
	Aroclor 1254	mg/kg	1	NS	NS	0.148		NA		0.0394		NA	
	Aroclor 1260	mg/kg	1	NS	NS	0.0352	U	NA		0.0334	U	NA	
	Aroclor 1262	mg/kg	1	NS	NS	0.0352	U	NA		0.0334	U	NA	
	Aroclor 1268	mg/kg	1	NS	NS	0.0352	U	NA		0.0334	U	NA	
	PCBs, Total	mg/kg	1	2	2	0.238		NA		0.0394		NA	
Pesticides													
	Delta-BHC	mg/kg	10	NS	NS	0.0017	U	NA		0.00166	U	NA	
	Lindane	mg/kg	0.003	NS	NS	0.000565	U	NA		0.000552	U	NA	
	Alpha-BHC	mg/kg	50	NS	NS	0.000706	U	NA		0.00069	U	NA	
	Beta-BHC	mg/kg	10	NS	NS	0.0017	U	NA		0.00166	U	NA	
	Heptachlor	mg/kg	0.3	NS	NS	0.000848	U	NA		0.000828	U	NA	
	Aldrin	mg/kg	0.08	NS	NS	0.0017	U	NA		0.00166	U	NA	
	Heptachlor epoxide	mg/kg	0.1	NS	NS	0.00318	U	NA		0.0031	U	NA	
	Endrin	mg/kg	10	NS	NS	0.000706	U	NA		0.00069	U	NA	
	Endrin ketone	mg/kg	NS	NS	NS	0.0017	U	NA		0.00166	U	NA	
	Dieldrin	mg/kg	0.08	NS	NS	0.00106	U	NA		0.00103	U	NA	
	4,4'-DDE	mg/kg	6	NS	NS	0.0017	U	NA		0.00166	U	NA	
	4,4'-DDD	mg/kg	8	NS	NS	0.00273		NA		0.00166	U	NA	
	4,4'-DDT	mg/kg	6	NS	NS	0.00483	IP	NA		0.0031	U	NA	
	Endosulfan I	mg/kg	0.5	NS	NS	0.0017	U	NA		0.00166	U	NA	
	Endosulfan II	mg/kg	0.5	NS	NS	0.0017	U	NA		0.00166	U	NA	
	Endosulfan sulfate	mg/kg	NS	NS	NS	0.000706	U	NA		0.00069	U	NA	
	Methoxychlor	mg/kg	200	NS	NS	0.00318	U	NA		0.0031	U	NA	
	Chlordane	mg/kg	0.7	NS	NS	0.0141	U	NA		0.0138	U	NA	
	Hexachlorobenzene	mg/kg	0.7	NS	NS	0.0017	U	NA		0.00166	U	NA	
Herbicides													
	MCP	mg/kg	NS	NS	NS	3.5	U	NA		3.4	U	NA	
	MCPA	mg/kg	100	NS	NS	3.5	U	NA		3.4	U	NA	
	Dalapon	mg/kg	1,000	NS	NS	0.035	U	NA		0.034	U	NA	
	Dicamba	mg/kg	500	NS	NS	0.035	U	NA		0.034	U	NA	
	Dichloroprop	mg/kg	NS	NS	NS	0.035	U	NA		0.034	U	NA	
	2,4-D	mg/kg	100	NS	NS	0.035	U	NA		0.034	U	NA	
	2,4-DB	mg/kg	100	NS	NS	0.035	U	NA		0.034	U	NA	
	2,4,5-T	mg/kg	100	NS	NS	0.035	U	NA		0.034	U	NA	
	2,4,5-TP (Silvex)	mg/kg	100	NS	NS	0.035	U	NA		0.034	U	NA	

Table 2 - Soil Characterization Analytical Results
Washington Street - RTN 3-34742
Somerville, Massachusetts

Sample Location: Sample Name: Lab Sample ID: Sample Date:						GLC-VMF(20)-RCS-2-FILL(30)-DC				GLC-VMF(48)-RCS-2-FILL(21)-DC			
						GLC-VMF(20)-RCS-2-FILL(30)-DC-COMP		GLC-VMF(20)-RCS-2-FILL(30)-DC-VOC-4		GLC-VMF(48)-RCS-2-FILL(21)-DC-COMP		GLC-VMF(48)-RCS-2-FILL(21)-DC-VOC-7	
						L2101324-03		L2101324-04		L2101324-09		L2101324-10	
						1/11/2021		1/11/2021		1/11/2021		1/11/2021	
Analysis	Analyte	Units	RCS-1	MA Unlined Landfill*	MA Lined Landfill*								
TPH													
	TPH (C10-C36)	mg/kg	1,000	2,500	5,000	73.7		NA		34.5	U	NA	
Metals, total													
	Antimony	mg/kg	20	NS	NS	2.11	U	NA		2.06	U	NA	
	Arsenic	mg/kg	20	40	40	6.09		NA		4.28		NA	
	Barium	mg/kg	1,000	NS	NS	31.7		NA		27.9		NA	
	Beryllium	mg/kg	90	NS	NS	0.211	U	NA		0.206	U	NA	
	Cadmium	mg/kg	70	30	80	0.598		NA		0.556		NA	
	Chromium	mg/kg	100	1,000	1,000	13.9		NA		15.9		NA	
	Lead	mg/kg	200	1,000	2,000	34.7		NA		25.2		NA	
	Mercury	mg/kg	20	10	10	0.146		NA		0.162		NA	
	Nickel	mg/kg	600	NS	NS	12.9		NA		11.7		NA	
	Selenium	mg/kg	400	NS	NS	2.11	U	NA		2.06	U	NA	
	Silver	mg/kg	100	NS	NS	0.422	U	NA		0.412	U	NA	
	Thallium	mg/kg	8	NS	NS	2.11	U	NA		2.06	U	NA	
	Vanadium	mg/kg	400	NS	NS	26.4		NA		34.8		NA	
	Zinc	mg/kg	1,000	NS	NS	60.3		NA		44.8		NA	
General Chemistry													
	Specific Conductance	umhos/cm	NS	4,000	8,000	110		NA		96		NA	
	pH	SU	NS	NS	NS	9.8		NA		8.2		NA	
	Cyanide, Reactive	mg/kg	NS	NS	NS	10	U	NA		10	U	NA	
	Sulfide, Reactive	mg/kg	NS	NS	NS	10	U	NA		10	U	NA	
	Ignitability		NS	NS	NS	NI		NA		NI		NA	

Notes:
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
su - Standard unit.
umhos/cm - Micro-mhos per centimeter.
I - The lower value for the two columns has been reported due to obvious interference.
ND - Not detected.
NI - Not ignitable.
NA - Sample not analyzed for the listed analyte.
NS - No MassDEP standards exist for this analyte.
P - The relative percent difference (RPD) between the results for the two columns exceeds the method-specified criteria.
U - Analyte was not detected at specified quantitation limit.
Values in **bold** indicate the analyte was detected.
VOCs - Volatile Organic Compounds.
SVOCs - Semivolatile Organic Compounds.
PCBs - Polychlorinated Biphenyls.
TPH - Total Petroleum Hydrocarbons.
RC - Reportable concentration.
(1) - MassDEP RC for C9-C10 aromatics used.
(2) - Criteria applicable to xylene (total), the sum of the xylene isomers.
(3) - MassDEP RC for Dichloropropane used.
(4) - MassDEP RC for Dichloropropene used.
(5) - MassDEP RC for Chlorotoluene used.
* - Reuse and Disposal of Contaminated Soil at Massachusetts Landfills, MassDEP Policy # COMM-97-001, August 1997.

Table 2 - Soil Characterization Analytical Results
Washington Street - RTN 3-34742
Somerville, Massachusetts

Sample Location: Sample Name: Lab Sample ID: Sample Date:						GLC-VMF(20)-RCS-2-FILL(12)- DC				GLC-VMF(20)-RCS-1-FILL(9)- DC			
						GLC-VMF(20)- RCS-2-FILL(12)- DC-COMP		GLC-VMF(20)- RCS-2-FILL(12)- DC-VOC-5		GLC-VMF(20)- RCS-1-FILL(9)- DC-COMP		GLC-VMF(20)- RCS-1-FILL(9)- DC-VOC-6	
						L2101885-03		L2101885-04		L2103654-05		L2103654-06	
						1/13/2021		1/13/2021		1/22/2021		1/22/2021	
Analysis	Analyte	Units	RCS-1	MA Unlined Landfill*	MA Lined Landfill*								
VOCs													
	Methylene chloride	mg/kg	0.1	NS	NS	NA		0.0037	U	NA		0.0034	U
	1,1-Dichloroethane	mg/kg	0.4	NS	NS	NA		0.00074	U	NA		0.00067	U
	Chloroform	mg/kg	0.2	NS	NS	NA		0.0011	U	NA		0.001	U
	Carbon tetrachloride	mg/kg	5	NS	NS	NA		0.00074	U	NA		0.00067	U
	1,2-Dichloropropane	mg/kg	0.1	NS	NS	NA		0.00074	U	NA		0.00067	U
	Dibromochloromethane	mg/kg	0.005	NS	NS	NA		0.00074	U	NA		0.00067	U
	1,1,2-Trichloroethane	mg/kg	0.1	NS	NS	NA		0.00074	U	NA		0.00067	U
	Tetrachloroethene	mg/kg	1	NS	NS	NA		0.00062		NA		0.00046	
	Chlorobenzene	mg/kg	1	NS	NS	NA		0.00037	U	NA		0.00034	U
	Trichlorofluoromethane	mg/kg	1,000	NS	NS	NA		0.0029	U	NA		0.0027	U
	1,2-Dichloroethane	mg/kg	0.1	NS	NS	NA		0.00074	U	NA		0.00067	U
	1,1,1-Trichloroethane	mg/kg	30	NS	NS	NA		0.00037	U	NA		0.00034	U
	Bromodichloromethane	mg/kg	0.1	NS	NS	NA		0.00037	U	NA		0.00034	U
	trans-1,3-Dichloropropene	mg/kg	0.01	NS	NS	NA		0.00074	U	NA		0.00067	U
	cis-1,3-Dichloropropene	mg/kg	0.01	NS	NS	NA		0.00037	U	NA		0.00034	U
	1,3-Dichloropropene, Total	mg/kg	0.01	NS	NS	NA		0.00037	U	NA		0.00034	U
	1,1-Dichloropropene	mg/kg	0.01(4)	NS	NS	NA		0.00037	U	NA		0.00034	U
	Bromoform	mg/kg	0.1	NS	NS	NA		0.0029	U	NA		0.0027	U
	1,1,2,2-Tetrachloroethane	mg/kg	0.005	NS	NS	NA		0.00037	U	NA		0.00034	U
	Benzene	mg/kg	2	NS	NS	NA		0.00037	U	NA		0.00034	U
	Toluene	mg/kg	30	NS	NS	NA		0.00074	U	NA		0.00067	U
	Ethylbenzene	mg/kg	40	NS	NS	NA		0.00074	U	NA		0.00067	U
	Chloromethane	mg/kg	100	NS	NS	NA		0.0029	U	NA		0.0027	U
	Bromomethane	mg/kg	0.5	NS	NS	NA		0.0015	U	NA		0.0013	U
	Vinyl chloride	mg/kg	0.7	NS	NS	NA		0.00074	U	NA		0.00067	U
	Chloroethane	mg/kg	100	NS	NS	NA		0.0015	U	NA		0.0013	U
	1,1-Dichloroethene	mg/kg	3	NS	NS	NA		0.00074	U	NA		0.00067	U
	trans-1,2-Dichloroethene	mg/kg	1	NS	NS	NA		0.0011	U	NA		0.001	U
	Trichloroethene	mg/kg	0.3	NS	NS	NA		0.00037	U	NA		0.00034	U
	1,2-Dichlorobenzene	mg/kg	9	NS	NS	NA		0.0015	U	NA		0.0013	U
	1,3-Dichlorobenzene	mg/kg	3	NS	NS	NA		0.0015	U	NA		0.0013	U
	1,4-Dichlorobenzene	mg/kg	0.7	NS	NS	NA		0.0015	U	NA		0.0013	U
	Methyl tert butyl ether	mg/kg	0.1	NS	NS	NA		0.0015	U	NA		0.0013	U
	p/m-Xylene	mg/kg	100(2)	NS	NS	NA		0.0015	U	NA		0.0013	U
	o-Xylene	mg/kg	100(2)	NS	NS	NA		0.00074	U	NA		0.00067	U
	Xylenes, Total	mg/kg	100	NS	NS	NA		0.00074	U	NA		0.00067	U
	cis-1,2-Dichloroethene	mg/kg	0.1	NS	NS	NA		0.00074	U	NA		0.00067	U
	1,2-Dichloroethene, Total	mg/kg	0.3	NS	NS	NA		0.00074	U	NA		0.00067	U
	Dibromomethane	mg/kg	500	NS	NS	NA		0.0015	U	NA		0.0013	U
	1,2,3-Trichloropropane	mg/kg	100	NS	NS	NA		0.0015	U	NA		0.0013	U
	Styrene	mg/kg	3	NS	NS	NA		0.00074	U	NA		0.00067	U
	Dichlorodifluoromethane	mg/kg	1,000	NS	NS	NA		0.0074	U	NA		0.0067	U
	Acetone	mg/kg	6	NS	NS	NA		0.018		NA		0.017	U
	Carbon disulfide	mg/kg	100	NS	NS	NA		0.0074	U	NA		0.0067	U
	Methyl ethyl ketone	mg/kg	4	NS	NS	NA		0.0074	U	NA		0.0067	U
	Methyl isobutyl ketone	mg/kg	0.4	NS	NS	NA		0.0074	U	NA		0.0067	U
	2-Hexanone	mg/kg	100	NS	NS	NA		0.0074	U	NA		0.0067	U
	Bromochloromethane	mg/kg	NS	NS	NS	NA		0.0015	U	NA		0.0013	U
	Tetrahydrofuran	mg/kg	500	NS	NS	NA		0.0029	U	NA		0.0027	U
	2,2-Dichloropropane	mg/kg	0.1(3)	NS	NS	NA		0.0015	U	NA		0.0013	U
	1,2-Dibromoethane	mg/kg	0.1	NS	NS	NA		0.00074	U	NA		0.00067	U
	1,3-Dichloropropane	mg/kg	500	NS	NS	NA		0.0015	U	NA		0.0013	U
	1,1,1,2-Tetrachloroethane	mg/kg	0.1	NS	NS	NA		0.00037	U	NA		0.00034	U
	Bromobenzene	mg/kg	100	NS	NS	NA		0.0015	U	NA		0.0013	U
	n-Butylbenzene	mg/kg	100(1)	NS	NS	NA		0.00074	U	NA		0.00067	U
	sec-Butylbenzene	mg/kg	100(1)	NS	NS	NA		0.00074	U	NA		0.00067	U
	tert-Butylbenzene	mg/kg	100	NS	NS	NA		0.0015	U	NA		0.0013	U
	o-Chlorotoluene	mg/kg	100	NS	NS	NA		0.0015	U	NA		0.0013	U
	p-Chlorotoluene	mg/kg	100(5)	NS	NS	NA		0.0015	U	NA		0.0013	U

Table 2 - Soil Characterization Analytical Results
Washington Street - RTN 3-34742
Somerville, Massachusetts

Sample Location: Sample Name: Lab Sample ID: Sample Date:						GLC-VMF(20)-RCS-2-FILL(12)-DC				GLC-VMF(20)-RCS-1-FILL(9)-DC			
						GLC-VMF(20)-RCS-2-FILL(12)-DC-COMP		GLC-VMF(20)-RCS-2-FILL(12)-DC-VOC-5		GLC-VMF(20)-RCS-1-FILL(9)-DC-COMP		GLC-VMF(20)-RCS-1-FILL(9)-DC-VOC-6	
						L2101885-03		L2101885-04		L2103654-05		L2103654-06	
						1/13/2021		1/13/2021		1/22/2021		1/22/2021	
Analysis	Analyte	Units	RCS-1	MA Unlined Landfill*	MA Lined Landfill*								
	1,2-Dibromo-3-chloropropane	mg/kg	10	NS	NS	NA		0.0022	U	NA		0.002	U
	Hexachlorobutadiene	mg/kg	30	NS	NS	NA		0.0029	U	NA		0.0027	U
	Isopropylbenzene	mg/kg	1,000	NS	NS	NA		0.00074	U	NA		0.00067	U
	p-Isopropyltoluene	mg/kg	100	NS	NS	NA		0.00074	U	NA		0.00067	U
	Naphthalene	mg/kg	4	NS	NS	NA		0.0029	U	NA		0.0027	U
	n-Propylbenzene	mg/kg	100	NS	NS	NA		0.00074	U	NA		0.00067	U
	1,2,3-Trichlorobenzene	mg/kg	NS	NS	NS	NA		0.0015	U	NA		0.0013	U
	1,2,4-Trichlorobenzene	mg/kg	2	NS	NS	NA		0.0015	U	NA		0.0013	U
	1,3,5-Trimethylbenzene	mg/kg	10	NS	NS	NA		0.0015	U	NA		0.0013	U
	1,2,4-Trimethylbenzene	mg/kg	1,000	NS	NS	NA		0.0015	U	NA		0.0013	U
	Diethyl ether	mg/kg	100	NS	NS	NA		0.0015	U	NA		0.0013	U
	Diisopropyl Ether	mg/kg	100	NS	NS	NA		0.0015	U	NA		0.0013	U
	Ethyl-Tert-Butyl-Ether	mg/kg	NS	NS	NS	NA		0.0015	U	NA		0.0013	U
	Tertiary-Amyl Methyl Ether	mg/kg	NS	NS	NS	NA		0.0015	U	NA		0.0013	U
	1,4-Dioxane	mg/kg	0.2	NS	NS	NA		0.059	U	NA		0.054	U
	Total VOCs	mg/kg	NS	4	10	NA		0.01862		NA		0.00046	
SVOCs													
	Acenaphthene	mg/kg	4	NS	NS	0.15	U	NA		0.14	U	NA	
	1,2,4-Trichlorobenzene	mg/kg	2	NS	NS	0.18	U	NA		0.17	U	NA	
	Hexachlorobenzene	mg/kg	0.7	NS	NS	0.077	U	NA		0.073	U	NA	
	Bis(2-chloroethyl)ether	mg/kg	0.7	NS	NS	0.077	U	NA		0.073	U	NA	
	2-Chloronaphthalene	mg/kg	1,000	NS	NS	0.18	U	NA		0.17	U	NA	
	1,2-Dichlorobenzene	mg/kg	9	NS	NS	0.18	U	NA		0.17	U	NA	
	1,3-Dichlorobenzene	mg/kg	3	NS	NS	0.18	U	NA		0.17	U	NA	
	1,4-Dichlorobenzene	mg/kg	0.7	NS	NS	0.077	U	NA		0.073	U	NA	
	3,3'-Dichlorobenzidine	mg/kg	3	NS	NS	0.18	U	NA		0.17	U	NA	
	2,4-Dinitrotoluene	mg/kg	0.7	NS	NS	0.077	U	NA		0.073	U	NA	
	2,6-Dinitrotoluene	mg/kg	100	NS	NS	0.18	U	NA		0.17	U	NA	
	Azobenzene	mg/kg	50	NS	NS	0.18	U	NA		0.17	U	NA	
	Fluoranthene	mg/kg	1,000	NS	NS	1.2		NA		0.4		NA	
	4-Bromophenyl phenyl ether	mg/kg	100	NS	NS	0.18	U	NA		0.17	U	NA	
	Bis(2-chloroisopropyl)ether	mg/kg	0.7	NS	NS	0.077	U	NA		0.073	U	NA	
	Bis(2-chloroethoxy)methane	mg/kg	500	NS	NS	0.2	U	NA		0.19	U	NA	
	Hexachlorobutadiene	mg/kg	30	NS	NS	0.18	U	NA		0.17	U	NA	
	Hexachloroethane	mg/kg	0.7	NS	NS	0.077	U	NA		0.073	U	NA	
	Isophorone	mg/kg	100	NS	NS	0.16	U	NA		0.16	U	NA	
	Naphthalene	mg/kg	4	NS	NS	0.23		NA		0.17	U	NA	
	Nitrobenzene	mg/kg	500	NS	NS	0.16	U	NA		0.16	U	NA	
	Bis(2-ethylhexyl)phthalate	mg/kg	90	NS	NS	0.18	U	NA		0.17	U	NA	
	Butyl benzyl phthalate	mg/kg	100	NS	NS	0.18	U	NA		0.17	U	NA	
	Di-n-butylphthalate	mg/kg	50	NS	NS	0.18	U	NA		0.17	U	NA	
	Di-n-octylphthalate	mg/kg	1,000	NS	NS	0.18	U	NA		0.17	U	NA	
	Diethyl phthalate	mg/kg	10	NS	NS	0.18	U	NA		0.17	U	NA	
	Dimethyl phthalate	mg/kg	0.7	NS	NS	0.077	U	NA		0.073	U	NA	
	Benzo(a)anthracene	mg/kg	7	NS	NS	0.66		NA		0.2		NA	
	Benzo(a)pyrene	mg/kg	2	NS	NS	0.66		NA		0.18		NA	
	Benzo(b)fluoranthene	mg/kg	7	NS	NS	0.83		NA		0.23		NA	
	Benzo(k)fluoranthene	mg/kg	70	NS	NS	0.25		NA		0.1	U	NA	
	Chrysene	mg/kg	70	NS	NS	0.66		NA		0.19		NA	
	Acenaphthylene	mg/kg	1	NS	NS	0.15	U	NA		0.14	U	NA	
	Anthracene	mg/kg	1,000	NS	NS	0.21		NA		0.1	U	NA	
	Benzo(ghi)perylene	mg/kg	1,000	NS	NS	0.42		NA		0.14	U	NA	
	Fluorene	mg/kg	1,000	NS	NS	0.18	U	NA		0.17	U	NA	
	Phenanthrene	mg/kg	10	NS	NS	0.74		NA		0.23		NA	
	Dibenzo(a,h)anthracene	mg/kg	0.7	NS	NS	0.11		NA		0.073	U	NA	
	Indeno(1,2,3-cd)pyrene	mg/kg	7	NS	NS	0.42		NA		0.14	U	NA	
	Pyrene	mg/kg	1,000	NS	NS	1.1		NA		0.36		NA	
	Aniline	mg/kg	1,000	NS	NS	0.22	U	NA		0.21	U	NA	
	4-Chloroaniline	mg/kg	1	NS	NS	0.18	U	NA		0.17	U	NA	
	Dibenzofuran	mg/kg	100	NS	NS	0.18	U	NA		0.17	U	NA	
	2-Methylnaphthalene	mg/kg	0.7	NS	NS	0.1		NA		0.073	U	NA	

Table 2 - Soil Characterization Analytical Results
Washington Street - RTN 3-34742
Somerville, Massachusetts

Sample Location: Sample Name: Lab Sample ID: Sample Date:						GLC-VMF(20)-RCS-2-FILL(12)- DC				GLC-VMF(20)-RCS-1-FILL(9)- DC			
						GLC-VMF(20)- RCS-2-FILL(12)- DC-COMP		GLC-VMF(20)- RCS-2-FILL(12)- DC-VOC-5		GLC-VMF(20)- RCS-1-FILL(9)- DC-COMP		GLC-VMF(20)- RCS-1-FILL(9)- DC-VOC-6	
						L2101885-03		L2101885-04		L2103654-05		L2103654-06	
						1/13/2021		1/13/2021		1/22/2021		1/22/2021	
Analysis	Analyte	Units	RCS-1	MA Unlined Landfill*	MA Lined Landfill*								
	Acetophenone	mg/kg	1,000	NS	NS	0.18	U	NA		0.17	U	NA	
	2,4,6-Trichlorophenol	mg/kg	0.7	NS	NS	0.077	U	NA		0.073	U	NA	
	2-Chlorophenol	mg/kg	0.7	NS	NS	0.077	U	NA		0.073	U	NA	
	2,4-Dichlorophenol	mg/kg	0.7	NS	NS	0.077	U	NA		0.073	U	NA	
	2,4-Dimethylphenol	mg/kg	0.7	NS	NS	0.077	U	NA		0.073	U	NA	
	2-Nitrophenol	mg/kg	100	NS	NS	0.4	U	NA		0.38	U	NA	
	4-Nitrophenol	mg/kg	100	NS	NS	0.26	U	NA		0.24	U	NA	
	2,4-Dinitrophenol	mg/kg	3	NS	NS	0.88	U	NA		0.83	U	NA	
	Pentachlorophenol	mg/kg	3	NS	NS	0.37	U	NA		0.35	U	NA	
	Phenol	mg/kg	1	NS	NS	0.18	U	NA		0.17	U	NA	
	2-Methylphenol	mg/kg	500	NS	NS	0.18	U	NA		0.17	U	NA	
	3-Methylphenol/4-Methylphenol	mg/kg	500	NS	NS	0.26	U	NA		0.25	U	NA	
	2,4,5-Trichlorophenol	mg/kg	4	NS	NS	0.18	U	NA		0.17	U	NA	
	Pyridine	mg/kg	500	NS	NS	0.2	U	NA		0.19	U	NA	
	Total SVOCs	mg/kg	NS	100	100	7.59		NA		1.79		NA	
PCBs													
	Aroclor 1016	mg/kg	1	NS	NS	0.18	U	NA		0.0338	U	NA	
	Aroclor 1221	mg/kg	1	NS	NS	0.18	U	NA		0.0338	U	NA	
	Aroclor 1232	mg/kg	1	NS	NS	0.18	U	NA		0.0338	U	NA	
	Aroclor 1242	mg/kg	1	NS	NS	0.18	U	NA		0.0338	U	NA	
	Aroclor 1248	mg/kg	1	NS	NS	0.18	U	NA		0.0338	U	NA	
	Aroclor 1254	mg/kg	1	NS	NS	0.928		NA		0.0338	U	NA	
	Aroclor 1260	mg/kg	1	NS	NS	0.18	U	NA		0.0338	U	NA	
	Aroclor 1262	mg/kg	1	NS	NS	0.18	U	NA		0.0338	U	NA	
	Aroclor 1268	mg/kg	1	NS	NS	0.18	U	NA		0.0338	U	NA	
	PCBs, Total	mg/kg	1	2	2	0.928		NA		0.0338	U	NA	
Pesticides													
	Delta-BHC	mg/kg	10	NS	NS	0.00171	U	NA		0.0017	U	NA	
	Lindane	mg/kg	0.003	NS	NS	0.000569	U	NA		0.000568	U	NA	
	Alpha-BHC	mg/kg	50	NS	NS	0.000711	U	NA		0.00071	U	NA	
	Beta-BHC	mg/kg	10	NS	NS	0.00171	U	NA		0.0017	U	NA	
	Heptachlor	mg/kg	0.3	NS	NS	0.000853	U	NA		0.000852	U	NA	
	Aldrin	mg/kg	0.08	NS	NS	0.00171	U	NA		0.0017	U	NA	
	Heptachlor epoxide	mg/kg	0.1	NS	NS	0.0032	U	NA		0.0032	U	NA	
	Endrin	mg/kg	10	NS	NS	0.000711	U	NA		0.00071	U	NA	
	Endrin ketone	mg/kg	NS	NS	NS	0.00171	U	NA		0.0017	U	NA	
	Dieldrin	mg/kg	0.08	NS	NS	0.00107	U	NA		0.00106	U	NA	
	4,4'-DDE	mg/kg	6	NS	NS	0.00171	U	NA		0.0017	U	NA	
	4,4'-DDD	mg/kg	8	NS	NS	0.00539		NA		0.0017	U	NA	
	4,4'-DDT	mg/kg	6	NS	NS	0.0032	U	NA		0.0032	U	NA	
	Endosulfan I	mg/kg	0.5	NS	NS	0.00171	U	NA		0.0017	U	NA	
	Endosulfan II	mg/kg	0.5	NS	NS	0.00171	U	NA		0.0017	U	NA	
	Endosulfan sulfate	mg/kg	NS	NS	NS	0.000711	U	NA		0.00071	U	NA	
	Methoxychlor	mg/kg	200	NS	NS	0.0032	U	NA		0.0032	U	NA	
	Chlordane	mg/kg	0.7	NS	NS	0.0142	U	NA		0.0142	U	NA	
	Hexachlorobenzene	mg/kg	0.7	NS	NS	0.00171	U	NA		0.0017	U	NA	
Herbicides													
	MCP	mg/kg	NS	NS	NS	3.7	U	NA		3.5	U	NA	
	MCPA	mg/kg	100	NS	NS	3.7	U	NA		3.5	U	NA	
	Dalapon	mg/kg	1,000	NS	NS	0.037	U	NA		0.035	U	NA	
	Dicamba	mg/kg	500	NS	NS	0.037	U	NA		0.035	U	NA	
	Dichloroprop	mg/kg	NS	NS	NS	0.037	U	NA		0.035	U	NA	
	2,4-D	mg/kg	100	NS	NS	0.037	U	NA		0.035	U	NA	
	2,4-DB	mg/kg	100	NS	NS	0.037	U	NA		0.035	U	NA	
	2,4,5-T	mg/kg	100	NS	NS	0.037	U	NA		0.035	U	NA	
	2,4,5-TP (Silvex)	mg/kg	100	NS	NS	0.037	U	NA		0.035	U	NA	

Table 2 - Soil Characterization Analytical Results
Washington Street - RTN 3-34742
Somerville, Massachusetts

Sample Location: Sample Name: Lab Sample ID: Sample Date:						GLC-VMF(20)-RCS-2-FILL(12)-DC				GLC-VMF(20)-RCS-1-FILL(9)-DC			
						GLC-VMF(20)-RCS-2-FILL(12)-DC-COMP		GLC-VMF(20)-RCS-2-FILL(12)-DC-VOC-5		GLC-VMF(20)-RCS-1-FILL(9)-DC-COMP		GLC-VMF(20)-RCS-1-FILL(9)-DC-VOC-6	
						L2101885-03		L2101885-04		L2103654-05		L2103654-06	
						1/13/2021		1/13/2021		1/22/2021		1/22/2021	
Analysis	Analyte	Units	RCS-1	MA Unlined Landfill*	MA Lined Landfill*								
TPH													
	TPH (C10-C36)	mg/kg	1,000	2,500	5,000	133		NA		42.9		NA	
Metals, total													
	Antimony	mg/kg	20	NS	NS	2.11	U	NA		2.02	U	NA	
	Arsenic	mg/kg	20	40	40	7.66		NA		2.46		NA	
	Barium	mg/kg	1,000	NS	NS	41.8		NA		26.9		NA	
	Beryllium	mg/kg	90	NS	NS	0.241		NA		0.202	U	NA	
	Cadmium	mg/kg	70	30	80	0.722		NA		0.489		NA	
	Chromium	mg/kg	100	1,000	1,000	16.5		NA		18		NA	
	Lead	mg/kg	200	1,000	2,000	37.4		NA		11		NA	
	Mercury	mg/kg	20	10	10	0.149		NA		0.074	U	NA	
	Nickel	mg/kg	600	NS	NS	14.2		NA		11.7		NA	
	Selenium	mg/kg	400	NS	NS	2.11	U	NA		2.02	U	NA	
	Silver	mg/kg	100	NS	NS	0.422	U	NA		0.404	U	NA	
	Thallium	mg/kg	8	NS	NS	2.11	U	NA		2.02	U	NA	
	Vanadium	mg/kg	400	NS	NS	31.2		NA		40		NA	
	Zinc	mg/kg	1,000	NS	NS	67.7		NA		43.1		NA	
General Chemistry													
	Specific Conductance	umhos/cm	NS	4,000	8,000	52		NA		45		NA	
	pH	SU	NS	NS	NS	8.2		NA		8.4		NA	
	Cyanide, Reactive	mg/kg	NS	NS	NS	10	U	NA		10	U	NA	
	Sulfide, Reactive	mg/kg	NS	NS	NS	10	U	NA		10	U	NA	
	Ignitability		NS	NS	NS	NI		NA		NI		NA	

Notes:
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
su - Standard unit.
umhos/cm - Micro-mhos per centimeter.
I - The lower value for the two columns has been reported due to obvious interference.
ND - Not detected.
NI - Not ignitable.
NA - Sample not analyzed for the listed analyte.
NS - No MassDEP standards exist for this analyte.
P - The relative percent difference (RPD) between the results for the two columns exceeds the method-specified criteria.
U - Analyte was not detected at specified quantitation limit.
Values in **bold** indicate the analyte was detected.
VOCs - Volatile Organic Compounds.
SVOCs - Semivolatile Organic Compounds.
PCBs - Polychlorinated Biphenyls.
TPH - Total Petroleum Hydrocarbons.
RC - Reportable concentration.
(1) - MassDEP RC for C9-C10 aromatics used.
(2) - Criteria applicable to xylene (total), the sum of the xylene isomers.
(3) - MassDEP RC for Dichloropropane used.
(4) - MassDEP RC for Dichloropropene used.
(5) - MassDEP RC for Chlorotoluene used.
* - Reuse and Disposal of Contaminated Soil at Massachusetts Landfills, MassDEP Policy # COMM-97-001, August 1997.

Table 2 - Soil Characterization Analytical Results
Washington Street - RTN 3-34742
Somerville, Massachusetts

Sample Location: Sample Name: Lab Sample ID: Sample Date:						GLC-VMF(48)-RCS-2-FILL(24)- DC				GLC-VMF(9H)-RCS-2-FILL(5)- DC			
						GLC-VMF(48)- RCS-2-FILL(24)- DC-COMP		GLC-VMF(48)- RCS-2-FILL(24)- DC-VOC-3		GLC-VMF(9H)- RCS-2-FILL(5)- DC-COMP		GLC-VMF(9H)- RCS-2-FILL(5)- DC-VOC-5	
						L2104491-01		L2104491-02		L2105273-05		L2105273-06	
						1/27/2021		1/27/2021		2/3/2021		2/3/2021	
Analysis	Analyte	Units	RCS-1	MA Unlined Landfill*	MA Lined Landfill*								
VOCs													
	Methylene chloride	mg/kg	0.1	NS	NS	NA		0.0031	U	NA		0.0043	U
	1,1-Dichloroethane	mg/kg	0.4	NS	NS	NA		0.00061	U	NA		0.00086	U
	Chloroform	mg/kg	0.2	NS	NS	NA		0.00092	U	NA		0.0013	U
	Carbon tetrachloride	mg/kg	5	NS	NS	NA		0.00061	U	NA		0.00086	U
	1,2-Dichloropropane	mg/kg	0.1	NS	NS	NA		0.00061	U	NA		0.00086	U
	Dibromochloromethane	mg/kg	0.005	NS	NS	NA		0.00061	U	NA		0.00086	U
	1,1,2-Trichloroethane	mg/kg	0.1	NS	NS	NA		0.00061	U	NA		0.00086	U
	Tetrachloroethene	mg/kg	1	NS	NS	NA		0.00035		NA		0.00071	
	Chlorobenzene	mg/kg	1	NS	NS	NA		0.00031	U	NA		0.00043	U
	Trichlorofluoromethane	mg/kg	1,000	NS	NS	NA		0.0024	U	NA		0.0034	U
	1,2-Dichloroethane	mg/kg	0.1	NS	NS	NA		0.00061	U	NA		0.00086	U
	1,1,1-Trichloroethane	mg/kg	30	NS	NS	NA		0.00031	U	NA		0.00043	U
	Bromodichloromethane	mg/kg	0.1	NS	NS	NA		0.00031	U	NA		0.00043	U
	trans-1,3-Dichloropropene	mg/kg	0.01	NS	NS	NA		0.00061	U	NA		0.00086	U
	cis-1,3-Dichloropropene	mg/kg	0.01	NS	NS	NA		0.00031	U	NA		0.00043	U
	1,3-Dichloropropene, Total	mg/kg	0.01	NS	NS	NA		0.00031	U	NA		0.00043	U
	1,1-Dichloropropene	mg/kg	0.01(4)	NS	NS	NA		0.00031	U	NA		0.00043	U
	Bromoform	mg/kg	0.1	NS	NS	NA		0.0024	U	NA		0.0034	U
	1,1,2,2-Tetrachloroethane	mg/kg	0.005	NS	NS	NA		0.00031	U	NA		0.00043	U
	Benzene	mg/kg	2	NS	NS	NA		0.00031	U	NA		0.00043	U
	Toluene	mg/kg	30	NS	NS	NA		0.00061	U	NA		0.00086	U
	Ethylbenzene	mg/kg	40	NS	NS	NA		0.00061	U	NA		0.0067	
	Chloromethane	mg/kg	100	NS	NS	NA		0.0024	U	NA		0.0034	U
	Bromomethane	mg/kg	0.5	NS	NS	NA		0.0012	U	NA		0.0017	U
	Vinyl chloride	mg/kg	0.7	NS	NS	NA		0.00061	U	NA		0.00086	U
	Chloroethane	mg/kg	100	NS	NS	NA		0.0012	U	NA		0.0017	U
	1,1-Dichloroethene	mg/kg	3	NS	NS	NA		0.00061	U	NA		0.00086	U
	trans-1,2-Dichloroethene	mg/kg	1	NS	NS	NA		0.00092	U	NA		0.0013	U
	Trichloroethene	mg/kg	0.3	NS	NS	NA		0.00031	U	NA		0.00043	U
	1,2-Dichlorobenzene	mg/kg	9	NS	NS	NA		0.0012	U	NA		0.0017	U
	1,3-Dichlorobenzene	mg/kg	3	NS	NS	NA		0.0012	U	NA		0.0017	U
	1,4-Dichlorobenzene	mg/kg	0.7	NS	NS	NA		0.0012	U	NA		0.0017	U
	Methyl tert butyl ether	mg/kg	0.1	NS	NS	NA		0.0012	U	NA		0.0017	U
	p/m-Xylene	mg/kg	100(2)	NS	NS	NA		0.0012	U	NA		0.0017	U
	o-Xylene	mg/kg	100(2)	NS	NS	NA		0.00061	U	NA		0.00086	U
	Xylenes, Total	mg/kg	100	NS	NS	NA		0.00061	U	NA		0.00086	U
	cis-1,2-Dichloroethene	mg/kg	0.1	NS	NS	NA		0.00061	U	NA		0.00086	U
	1,2-Dichloroethene, Total	mg/kg	0.3	NS	NS	NA		0.00061	U	NA		0.00086	U
	Dibromomethane	mg/kg	500	NS	NS	NA		0.0012	U	NA		0.0017	U
	1,2,3-Trichloropropane	mg/kg	100	NS	NS	NA		0.0012	U	NA		0.0017	U
	Styrene	mg/kg	3	NS	NS	NA		0.00061	U	NA		0.00086	U
	Dichlorodifluoromethane	mg/kg	1,000	NS	NS	NA		0.0061	U	NA		0.0086	U
	Acetone	mg/kg	6	NS	NS	NA		0.015	U	NA		0.021	U
	Carbon disulfide	mg/kg	100	NS	NS	NA		0.0061	U	NA		0.0086	U
	Methyl ethyl ketone	mg/kg	4	NS	NS	NA		0.0061	U	NA		0.0086	U
	Methyl isobutyl ketone	mg/kg	0.4	NS	NS	NA		0.0061	U	NA		0.0086	U
	2-Hexanone	mg/kg	100	NS	NS	NA		0.0061	U	NA		0.0086	U
	Bromochloromethane	mg/kg	NS	NS	NS	NA		0.0012	U	NA		0.0017	U
	Tetrahydrofuran	mg/kg	500	NS	NS	NA		0.0024	U	NA		0.0034	U
	2,2-Dichloropropane	mg/kg	0.1(3)	NS	NS	NA		0.0012	U	NA		0.0017	U
	1,2-Dibromoethane	mg/kg	0.1	NS	NS	NA		0.00061	U	NA		0.00086	U
	1,3-Dichloropropane	mg/kg	500	NS	NS	NA		0.0012	U	NA		0.0017	U
	1,1,1,2-Tetrachloroethane	mg/kg	0.1	NS	NS	NA		0.00031	U	NA		0.00043	U
	Bromobenzene	mg/kg	100	NS	NS	NA		0.0012	U	NA		0.0017	U
	n-Butylbenzene	mg/kg	100(1)	NS	NS	NA		0.00061	U	NA		0.00086	U
	sec-Butylbenzene	mg/kg	100(1)	NS	NS	NA		0.00061	U	NA		0.00086	U
	tert-Butylbenzene	mg/kg	100	NS	NS	NA		0.0012	U	NA		0.0017	U
	o-Chlorotoluene	mg/kg	100	NS	NS	NA		0.0012	U	NA		0.0017	U
	p-Chlorotoluene	mg/kg	100(5)	NS	NS	NA		0.0012	U	NA		0.0017	U

Table 2 - Soil Characterization Analytical Results
Washington Street - RTN 3-34742
Somerville, Massachusetts

Sample Location: Sample Name: Lab Sample ID: Sample Date:						GLC-VMF(48)-RCS-2-FILL(24)- DC				GLC-VMF(9H)-RCS-2-FILL(5)- DC			
						GLC-VMF(48)- RCS-2-FILL(24)- DC-COMP		GLC-VMF(48)- RCS-2-FILL(24)- DC-VOC-3		GLC-VMF(9H)- RCS-2-FILL(5)- DC-COMP		GLC-VMF(9H)- RCS-2-FILL(5)- DC-VOC-5	
						L2104491-01		L2104491-02		L2105273-05		L2105273-06	
						1/27/2021		1/27/2021		2/3/2021		2/3/2021	
Analysis	Analyte	Units	RCS-1	MA Unlined Landfill*	MA Lined Landfill*								
	1,2-Dibromo-3-chloropropane	mg/kg	10	NS	NS	NA		0.0018	U	NA		0.0026	U
	Hexachlorobutadiene	mg/kg	30	NS	NS	NA		0.0024	U	NA		0.0034	U
	Isopropylbenzene	mg/kg	1,000	NS	NS	NA		0.00061	U	NA		0.00086	U
	p-Isopropyltoluene	mg/kg	100	NS	NS	NA		0.00061	U	NA		0.00086	U
	Naphthalene	mg/kg	4	NS	NS	NA		0.0024	U	NA		0.0034	U
	n-Propylbenzene	mg/kg	100	NS	NS	NA		0.00061	U	NA		0.0016	
	1,2,3-Trichlorobenzene	mg/kg	NS	NS	NS	NA		0.0012	U	NA		0.0017	U
	1,2,4-Trichlorobenzene	mg/kg	2	NS	NS	NA		0.0012	U	NA		0.0017	U
	1,3,5-Trimethylbenzene	mg/kg	10	NS	NS	NA		0.0012	U	NA		0.0017	U
	1,2,4-Trimethylbenzene	mg/kg	1,000	NS	NS	NA		0.0012	U	NA		0.0017	U
	Diethyl ether	mg/kg	100	NS	NS	NA		0.0012	U	NA		0.0017	U
	Diisopropyl Ether	mg/kg	100	NS	NS	NA		0.0012	U	NA		0.0017	U
	Ethyl-Tert-Butyl-Ether	mg/kg	NS	NS	NS	NA		0.0012	U	NA		0.0017	U
	Tertiary-Amyl Methyl Ether	mg/kg	NS	NS	NS	NA		0.0012	U	NA		0.0017	U
	1,4-Dioxane	mg/kg	0.2	NS	NS	NA		0.049	U	NA		0.069	U
	Total VOCs	mg/kg	NS	4	10	NA		0.00035		NA		0.00901	
SVOCs													
	Acenaphthene	mg/kg	4	NS	NS	0.14	U	NA		0.14	U	NA	
	1,2,4-Trichlorobenzene	mg/kg	2	NS	NS	0.17	U	NA		0.18	U	NA	
	Hexachlorobenzene	mg/kg	0.7	NS	NS	0.072	U	NA		0.075	U	NA	
	Bis(2-chloroethyl)ether	mg/kg	0.7	NS	NS	0.072	U	NA		0.075	U	NA	
	2-Chloronaphthalene	mg/kg	1,000	NS	NS	0.17	U	NA		0.18	U	NA	
	1,2-Dichlorobenzene	mg/kg	9	NS	NS	0.17	U	NA		0.18	U	NA	
	1,3-Dichlorobenzene	mg/kg	3	NS	NS	0.17	U	NA		0.18	U	NA	
	1,4-Dichlorobenzene	mg/kg	0.7	NS	NS	0.072	U	NA		0.075	U	NA	
	3,3'-Dichlorobenzidine	mg/kg	3	NS	NS	0.17	U	NA		0.18	U	NA	
	2,4-Dinitrotoluene	mg/kg	0.7	NS	NS	0.072	U	NA		0.075	U	NA	
	2,6-Dinitrotoluene	mg/kg	100	NS	NS	0.17	U	NA		0.18	U	NA	
	Azobenzene	mg/kg	50	NS	NS	0.17	U	NA		0.18	U	NA	
	Fluoranthene	mg/kg	1,000	NS	NS	0.86		NA		0.3		NA	
	4-Bromophenyl phenyl ether	mg/kg	100	NS	NS	0.17	U	NA		0.18	U	NA	
	Bis(2-chloroisopropyl)ether	mg/kg	0.7	NS	NS	0.072	U	NA		0.075	U	NA	
	Bis(2-chloroethoxy)methane	mg/kg	500	NS	NS	0.18	U	NA		0.19	U	NA	
	Hexachlorobutadiene	mg/kg	30	NS	NS	0.17	U	NA		0.18	U	NA	
	Hexachloroethane	mg/kg	0.7	NS	NS	0.072	U	NA		0.075	U	NA	
	Isophorone	mg/kg	100	NS	NS	0.15	U	NA		0.16	U	NA	
	Naphthalene	mg/kg	4	NS	NS	0.17	U	NA		0.18	U	NA	
	Nitrobenzene	mg/kg	500	NS	NS	0.15	U	NA		0.16	U	NA	
	Bis(2-ethylhexyl)phthalate	mg/kg	90	NS	NS	0.17	U	NA		0.18	U	NA	
	Butyl benzyl phthalate	mg/kg	100	NS	NS	0.17	U	NA		0.18	U	NA	
	Di-n-butylphthalate	mg/kg	50	NS	NS	0.17	U	NA		0.18	U	NA	
	Di-n-octylphthalate	mg/kg	1,000	NS	NS	0.17	U	NA		0.18	U	NA	
	Diethyl phthalate	mg/kg	10	NS	NS	0.17	U	NA		0.18	U	NA	
	Dimethyl phthalate	mg/kg	0.7	NS	NS	0.072	U	NA		0.075	U	NA	
	Benzo(a)anthracene	mg/kg	7	NS	NS	0.48		NA		0.19		NA	
	Benzo(a)pyrene	mg/kg	2	NS	NS	0.53		NA		0.21		NA	
	Benzo(b)fluoranthene	mg/kg	7	NS	NS	0.64		NA		0.24		NA	
	Benzo(k)fluoranthene	mg/kg	70	NS	NS	0.22		NA		0.11	U	NA	
	Chrysene	mg/kg	70	NS	NS	0.49		NA		0.18		NA	
	Acenaphthylene	mg/kg	1	NS	NS	0.14	U	NA		0.14	U	NA	
	Anthracene	mg/kg	1,000	NS	NS	0.13		NA		0.11	U	NA	
	Benzo(ghi)perylene	mg/kg	1,000	NS	NS	0.29		NA		0.14	U	NA	
	Fluorene	mg/kg	1,000	NS	NS	0.17	U	NA		0.18	U	NA	
	Phenanthrene	mg/kg	10	NS	NS	0.38		NA		0.18		NA	
	Dibenzo(a,h)anthracene	mg/kg	0.7	NS	NS	0.072	U	NA		0.075	U	NA	
	Indeno(1,2,3-cd)pyrene	mg/kg	7	NS	NS	0.28		NA		0.14	U	NA	
	Pyrene	mg/kg	1,000	NS	NS	0.8		NA		0.27		NA	
	Aniline	mg/kg	1,000	NS	NS	0.2	U	NA		0.21	U	NA	
	4-Chloroaniline	mg/kg	1	NS	NS	0.17	U	NA		0.18	U	NA	
	Dibenzofuran	mg/kg	100	NS	NS	0.17	U	NA		0.18	U	NA	
	2-Methylnaphthalene	mg/kg	0.7	NS	NS	0.072	U	NA		0.075	U	NA	

Table 2 - Soil Characterization Analytical Results
Washington Street - RTN 3-34742
Somerville, Massachusetts

Sample Location: Sample Name: Lab Sample ID: Sample Date:						GLC-VMF(48)-RCS-2-FILL(24)- DC				GLC-VMF(9H)-RCS-2-FILL(5)- DC			
						GLC-VMF(48)- RCS-2-FILL(24)- DC-COMP		GLC-VMF(48)- RCS-2-FILL(24)- DC-VOC-3		GLC-VMF(9H)- RCS-2-FILL(5)- DC-COMP		GLC-VMF(9H)- RCS-2-FILL(5)- DC-VOC-5	
						L2104491-01		L2104491-02		L2105273-05		L2105273-06	
						1/27/2021		1/27/2021		2/3/2021		2/3/2021	
Analysis	Analyte	Units	RCS-1	MA Unlined Landfill*	MA Lined Landfill*								
	Acetophenone	mg/kg	1,000	NS	NS	0.17	U	NA		0.18	U	NA	
	2,4,6-Trichlorophenol	mg/kg	0.7	NS	NS	0.072	U	NA		0.075	U	NA	
	2-Chlorophenol	mg/kg	0.7	NS	NS	0.072	U	NA		0.075	U	NA	
	2,4-Dichlorophenol	mg/kg	0.7	NS	NS	0.072	U	NA		0.075	U	NA	
	2,4-Dimethylphenol	mg/kg	0.7	NS	NS	0.072	U	NA		0.075	U	NA	
	2-Nitrophenol	mg/kg	100	NS	NS	0.37	U	NA		0.39	U	NA	
	4-Nitrophenol	mg/kg	100	NS	NS	0.24	U	NA		0.25	U	NA	
	2,4-Dinitrophenol	mg/kg	3	NS	NS	0.82	U	NA		0.86	U	NA	
	Pentachlorophenol	mg/kg	3	NS	NS	0.34	U	NA		0.36	U	NA	
	Phenol	mg/kg	1	NS	NS	0.17	U	NA		0.18	U	NA	
	2-Methylphenol	mg/kg	500	NS	NS	0.17	U	NA		0.18	U	NA	
	3-Methylphenol/4-Methylphenol	mg/kg	500	NS	NS	0.25	U	NA		0.26	U	NA	
	2,4,5-Trichlorophenol	mg/kg	4	NS	NS	0.17	U	NA		0.18	U	NA	
	Pyridine	mg/kg	500	NS	NS	0.18	U	NA		0.19	U	NA	
	Total SVOCs	mg/kg	NS	100	100	5.1		NA		1.57		NA	
PCBs													
	Aroclor 1016	mg/kg	1	NS	NS	0.0343	U	NA		0.0361	U	NA	
	Aroclor 1221	mg/kg	1	NS	NS	0.0343	U	NA		0.0361	U	NA	
	Aroclor 1232	mg/kg	1	NS	NS	0.0343	U	NA		0.0361	U	NA	
	Aroclor 1242	mg/kg	1	NS	NS	0.0343	U	NA		0.0361	U	NA	
	Aroclor 1248	mg/kg	1	NS	NS	0.0343	U	NA		0.0361	U	NA	
	Aroclor 1254	mg/kg	1	NS	NS	0.095		NA		0.0406		NA	
	Aroclor 1260	mg/kg	1	NS	NS	0.0343	U	NA		0.0361	U	NA	
	Aroclor 1262	mg/kg	1	NS	NS	0.0343	U	NA		0.0361	U	NA	
	Aroclor 1268	mg/kg	1	NS	NS	0.0343	U	NA		0.0361	U	NA	
	PCBs, Total	mg/kg	1	2	2	0.095		NA		0.0406		NA	
Pesticides													
	Delta-BHC	mg/kg	10	NS	NS	0.00168	U	NA		0.00171	U	NA	
	Lindane	mg/kg	0.003	NS	NS	0.000559	U	NA		0.00057	U	NA	
	Alpha-BHC	mg/kg	50	NS	NS	0.000699	U	NA		0.000712	U	NA	
	Beta-BHC	mg/kg	10	NS	NS	0.00168	U	NA		0.00171	U	NA	
	Heptachlor	mg/kg	0.3	NS	NS	0.000839	U	NA		0.000854	U	NA	
	Aldrin	mg/kg	0.08	NS	NS	0.00168	U	NA		0.00171	U	NA	
	Heptachlor epoxide	mg/kg	0.1	NS	NS	0.00315	U	NA		0.0032	U	NA	
	Endrin	mg/kg	10	NS	NS	0.000699	U	NA		0.000712	U	NA	
	Endrin ketone	mg/kg	NS	NS	NS	0.00168	U	NA		0.00171	U	NA	
	Dieldrin	mg/kg	0.08	NS	NS	0.00105	U	NA		0.00107	U	NA	
	4,4'-DDE	mg/kg	6	NS	NS	0.00168	U	NA		0.00171	U	NA	
	4,4'-DDD	mg/kg	8	NS	NS	0.00168	U	NA		0.00171	U	NA	
	4,4'-DDT	mg/kg	6	NS	NS	0.00315	U	NA		0.00544		NA	
	Endosulfan I	mg/kg	0.5	NS	NS	0.00168	U	NA		0.00171	U	NA	
	Endosulfan II	mg/kg	0.5	NS	NS	0.00168	U	NA		0.00171	U	NA	
	Endosulfan sulfate	mg/kg	NS	NS	NS	0.000699	U	NA		0.000712	U	NA	
	Methoxychlor	mg/kg	200	NS	NS	0.00315	U	NA		0.0032	U	NA	
	Chlordane	mg/kg	0.7	NS	NS	0.014	U	NA		0.0142	U	NA	
	Hexachlorobenzene	mg/kg	0.7	NS	NS	0.00168	U	NA		0.00171	U	NA	
Herbicides													
	MCP	mg/kg	NS	NS	NS	3.5	U	NA		3.6	U	NA	
	MCPA	mg/kg	100	NS	NS	3.5	U	NA		3.6	U	NA	
	Dalapon	mg/kg	1,000	NS	NS	0.035	U	NA		0.036	U	NA	
	Dicamba	mg/kg	500	NS	NS	0.035	U	NA		0.036	U	NA	
	Dichloroprop	mg/kg	NS	NS	NS	0.035	U	NA		0.036	U	NA	
	2,4-D	mg/kg	100	NS	NS	0.035	U	NA		0.036	U	NA	
	2,4-DB	mg/kg	100	NS	NS	0.035	U	NA		0.036	U	NA	
	2,4,5-T	mg/kg	100	NS	NS	0.035	U	NA		0.036	U	NA	
	2,4,5-TP (Silvex)	mg/kg	100	NS	NS	0.035	U	NA		0.036	U	NA	

Table 2 - Soil Characterization Analytical Results
Washington Street - RTN 3-34742
Somerville, Massachusetts

Sample Location: Sample Name: Lab Sample ID: Sample Date:						GLC-VMF(48)-RCS-2-FILL(24)-DC				GLC-VMF(9H)-RCS-2-FILL(5)-DC			
						GLC-VMF(48)-RCS-2-FILL(24)-DC-COMP		GLC-VMF(48)-RCS-2-FILL(24)-DC-VOC-3		GLC-VMF(9H)-RCS-2-FILL(5)-DC-COMP		GLC-VMF(9H)-RCS-2-FILL(5)-DC-VOC-5	
						L2104491-01		L2104491-02		L2105273-05		L2105273-06	
						1/27/2021		1/27/2021		2/3/2021		2/3/2021	
Analysis	Analyte	Units	RCS-1	MA Unlined Landfill*	MA Lined Landfill*								
TPH													
	TPH (C10-C36)	mg/kg	1,000	2,500	5,000	79		NA		76.8		NA	
Metals, total													
	Antimony	mg/kg	20	NS	NS	2.06	U	NA		2.11	U	NA	
	Arsenic	mg/kg	20	40	40	4.49		NA		4.24		NA	
	Barium	mg/kg	1,000	NS	NS	32.2		NA		27.1		NA	
	Beryllium	mg/kg	90	NS	NS	0.206	U	NA		0.211	U	NA	
	Cadmium	mg/kg	70	30	80	0.526		NA		0.561		NA	
	Chromium	mg/kg	100	1,000	1,000	19.2		NA		14.4		NA	
	Lead	mg/kg	200	1,000	2,000	22.6		NA		19.7		NA	
	Mercury	mg/kg	20	10	10	0.077	U	NA		0.075	U	NA	
	Nickel	mg/kg	600	NS	NS	12.2		NA		11.9		NA	
	Selenium	mg/kg	400	NS	NS	2.06	U	NA		2.11	U	NA	
	Silver	mg/kg	100	NS	NS	0.411	U	NA		0.422	U	NA	
	Thallium	mg/kg	8	NS	NS	2.06	U	NA		2.11	U	NA	
	Vanadium	mg/kg	400	NS	NS	26.8		NA		30.1		NA	
	Zinc	mg/kg	1,000	NS	NS	39.8		NA		43.3		NA	
General Chemistry													
	Specific Conductance	umhos/cm	NS	4,000	8,000	40		NA		100		NA	
	pH	SU	NS	NS	NS	8.1		NA		8.1		NA	
	Cyanide, Reactive	mg/kg	NS	NS	NS	10	U	NA		10	U	NA	
	Sulfide, Reactive	mg/kg	NS	NS	NS	10	U	NA		10	U	NA	
	Ignitability		NS	NS	NS	NI		NA		NI		NA	

Notes:

mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).

su - Standard unit.

umhos/cm - Micro-mhos per centimeter.

I - The lower value for the two columns has been reported due to obvious interference.

ND - Not detected.

NI - Not ignitable.

NA - Sample not analyzed for the listed analyte.

NS - No MassDEP standards exist for this analyte.

P - The relative percent difference (RPD) between the results for the two columns exceeds the method-specified criteria.

U - Analyte was not detected at specified quantitation limit.

Values in **bold** indicate the analyte was detected.

VOCs - Volatile Organic Compounds.

SVOCs - Semivolatile Organic Compounds.

PCBs - Polychlorinated Biphenyls.

TPH - Total Petroleum Hydrocarbons.

RC - Reportable concentration.

(1) - MassDEP RC for C9-C10 aromatics used.

(2) - Criteria applicable to xylene (total), the sum of the xylene isomers.

(3) - MassDEP RC for Dichloropropane used.

(4) - MassDEP RC for Dichloropropene used.

(5) - MassDEP RC for Chlorotoluene used.

* - Reuse and Disposal of Contaminated Soil at Massachusetts Landfills, MassDEP Policy # COMM-97-001, August 1997.

Table 2 - Soil Characterization Analytical Results
Washington Street - RTN 3-34742
Somerville, Massachusetts

Sample Location:						GLC-VMF(48)- RCS-2-FILL(48)	GLC-WASHPS			GLC- OSCDRILLSPOIL LS	GLC-VMF(20)- RCS-1-FILL(16)	GLC-1001B-(0-3)	GLC-NP-314-15
Sample Name*: Sample Depth*: Sample Date:						GLC-VMF(48)- RCS-2-FILL(48)- DC-COMP/GLC- VMF(48)-RCS-2- FILL(48)-DC-VOC- 7 N/A/7 ft 4/6/2021	GLC-WASHPS- 40821-DC-COMP (0-2)/GLC- WASHPS-40821- DC-VOC (1-2) 0-2/1-2 ft 4/8/2021	GLC-WASHPS- 041221-DC-COMP/GLC- COMP/GLC- WASHPS-041221- DC-VOC-6 N/A/6 ft 4/23/2021	OSCDRILLSPOIL S-210329-DC- COMP/GLC- OSCDRILLSPOIL S-210329-DC-VOC 8 N/A/8 ft 4/23/2021	GLC-VMF(20)- RCS-1-FILL(16)- DC-COMP/GLC- VMF(20)-RCS-1- FILL(16)-DC-VOC- 2 N/A/2 ft 4/28/2021	GLC-1001B-(0-3)- 041521-DC- COMP/GLC-1001B- (0-3)-041521-DC- VOC-3 N/A/3 ft 4/28/2021	GLC-NP-314-15- DC-COMP/GLC- NP-314-15-DC- VOC(4) N/A/4 ft 6/10/2021	
Analysis	Analyte	Unit	RCS-1	Unlined Landfill*	Lined Landfill*								
VOCs													
	Methylene chloride	mg/kg	0.1	NS	NS	0.0026 U	0.0038 U	0.0042 U	0.0038 U	0.0028 U	0.0036 U	0.0026 U	
	1,1-Dichloroethane	mg/kg	0.4	NS	NS	0.00051 U	0.00077 U	0.00083 U	0.00076 U	0.00057 U	0.00072 U	0.00052 U	
	Chloroform	mg/kg	0.2	NS	NS	0.00077 U	0.0012 U	0.0012 U	0.0011 U	0.00085 U	0.0011 U	0.00078 U	
	Carbon tetrachloride	mg/kg	5	NS	NS	0.00051 U	0.00077 U	0.00083 U	0.00076 U	0.00057 U	0.00072 U	0.00052 U	
	1,2-Dichloropropane	mg/kg	0.1	NS	NS	0.00051 U	0.00077 U	0.00083 U	0.00076 U	0.00057 U	0.00072 U	0.00052 U	
	Dibromochloromethane	mg/kg	0.005	NS	NS	0.00051 U	0.00077 U	0.00083 U	0.00076 U	0.00057 U	0.00072 U	0.00052 U	
	1,1,2-Trichloroethane	mg/kg	0.1	NS	NS	0.00051 U	0.00077 U	0.00083 U	0.00076 U	0.00057 U	0.00072 U	0.00052 U	
	Tetrachloroethene	mg/kg	1	NS	NS	0.00034	0.0024	0.0010	0.00056	0.00040	0.00036 U	0.00041	
	Chlorobenzene	mg/kg	1	NS	NS	0.00026 U	0.00038 U	0.00042 U	0.00038 U	0.00028 U	0.00036 U	0.00026 U	
	Trichlorofluoromethane	mg/kg	1,000	NS	NS	0.0020 U	0.0031 U	0.0033 U	0.0030 U	0.0023 U	0.0029 U	0.0021 U	
	1,2-Dichloroethane	mg/kg	0.1	NS	NS	0.00051 U	0.00077 U	0.00083 U	0.00076 U	0.00057 U	0.00072 U	0.00052 U	
	1,1,1-Trichloroethane	mg/kg	30	NS	NS	0.00026 U	0.00038 U	0.00042 U	0.00038 U	0.00028 U	0.00036 U	0.00026 U	
	Bromodichloromethane	mg/kg	0.1	NS	NS	0.00026 U	0.00038 U	0.00042 U	0.00038 U	0.00028 U	0.00036 U	0.00026 U	
	trans-1,3-Dichloropropene	mg/kg	0.01	NS	NS	0.00051 U	0.00077 U	0.00083 U	0.00076 U	0.00057 U	0.00072 U	0.00052 U	
	cis-1,3-Dichloropropene	mg/kg	0.01	NS	NS	0.00026 U	0.00038 U	0.00042 U	0.00038 U	0.00028 U	0.00036 U	0.00026 U	
	1,3-Dichloropropene, Total	mg/kg	0.01	NS	NS	0.00026 U	0.00038 U	0.00042 U	0.00038 U	0.00028 U	0.00036 U	0.00026 U	
	1,1-Dichloropropene	mg/kg	0.01(4)	NS	NS	0.00026 U	0.00038 U	0.00042 U	0.00038 U	0.00028 U	0.00036 U	0.00026 U	
	Bromoform	mg/kg	0.1	NS	NS	0.0020 U	0.0031 U	0.0033 U	0.0030 U	0.0023 U	0.0029 U	0.0021 U	
	1,1,2,2-Tetrachloroethane	mg/kg	0.005	NS	NS	0.00026 U	0.00038 U	0.00042 U	0.00038 U	0.00028 U	0.00036 U	0.00026 U	
	Benzene	mg/kg	2	NS	NS	0.00026 U	0.00038 U	0.00042 U	0.00038 U	0.00028 U	0.0035	0.00026 U	
	Toluene	mg/kg	30	NS	NS	0.00051 U	0.00079	0.00083 U	0.00076 U	0.00057 U	0.00072 U	0.00052 U	
	Ethylbenzene	mg/kg	40	NS	NS	0.00051 U	0.00077 U	0.00083 U	0.00076 U	0.00057 U	0.00072 U	0.00052 U	
	Chloromethane	mg/kg	100	NS	NS	0.0020 U	0.0031 U	0.0033 U	0.0030 U	0.0023 U	0.0029 U	0.0021 U	
	Bromomethane	mg/kg	0.5	NS	NS	0.0010 U	0.0015 U	0.0017 U	0.0015 U	0.0011 U	0.0014 U	0.0010 U	
	Vinyl chloride	mg/kg	0.7	NS	NS	0.00051 U	0.00077 U	0.00083 U	0.00076 U	0.00057 U	0.00072 U	0.00052 U	
	Chloroethane	mg/kg	100	NS	NS	0.0010 U	0.0015 U	0.0017 U	0.0015 U	0.0011 U	0.0014 U	0.0010 U	
	1,1-Dichloroethene	mg/kg	3	NS	NS	0.00051 U	0.00077 U	0.00083 U	0.00076 U	0.00057 U	0.00072 U	0.00052 U	
	trans-1,2-Dichloroethene	mg/kg	1	NS	NS	0.00077 U	0.0012 U	0.0012 U	0.0011 U	0.00085 U	0.0011 U	0.00078 U	
	Trichloroethene	mg/kg	0.3	NS	NS	0.00026 U	0.00038 U	0.00042 U	0.00038 U	0.00028 U	0.00036 U	0.00026 U	
	1,2-Dichlorobenzene	mg/kg	9	NS	NS	0.0010 U	0.0015 U	0.0017 U	0.0015 U	0.0011 U	0.0014 U	0.0010 U	
	1,3-Dichlorobenzene	mg/kg	3	NS	NS	0.0010 U	0.0015 U	0.0017 U	0.0015 U	0.0011 U	0.0014 U	0.0010 U	
	1,4-Dichlorobenzene	mg/kg	0.7	NS	NS	0.0010 U	0.0015 U	0.0017 U	0.0015 U	0.0011 U	0.0014 U	0.0010 U	
	Methyl tert butyl ether	mg/kg	0.1	NS	NS	0.0010 U	0.0015 U	0.0017 U	0.0015 U	0.0011 U	0.0014 U	0.0010 U	
	p/m-Xylene	mg/kg	100(2)	NS	NS	0.0010 U	0.0015 U	0.0017 U	0.0015 U	0.0011 U	0.0014 U	0.0010 U	
	o-Xylene	mg/kg	100(2)	NS	NS	0.00051 U	0.00077 U	0.00083 U	0.00076 U	0.00057 U	0.00072 U	0.00052 U	
	Xylenes (Total)	mg/kg	100	NS	NS	0.00051 U	0.00077 U	0.00083 U	0.00076 U	0.00057 U	0.00072 U	0.00052 U	
	cis-1,2-Dichloroethene	mg/kg	0.1	NS	NS	0.00051 U	0.00077 U	0.00083 U	0.00076 U	0.00057 U	0.00072 U	0.00052 U	
	1,2-Dichloroethene (total)	mg/kg	0.3	NS	NS	0.00051 U	0.00077 U	0.00083 U	0.00076 U	0.00057 U	0.00072 U	0.00052 U	
	Dibromomethane	mg/kg	500	NS	NS	0.0010 U	0.0015 U	0.0017 U	0.0015 U	0.0011 U	0.0014 U	0.0010 U	
	1,2,3-Trichloropropane	mg/kg	100	NS	NS	0.0010 U	0.0015 U	0.0017 U	0.0015 U	0.0011 U	0.0014 U	0.0010 U	
	Styrene	mg/kg	3	NS	NS	0.00051 U	0.00077 U	0.00083 U	0.00076 U	0.00057 U	0.00072 U	0.00052 U	
	Dichlorodifluoromethane	mg/kg	1,000	NS	NS	0.0051 U	0.0077 U	0.0083 U	0.0076 U	0.0057 U	0.0072 U	0.0052 U	
	Acetone	mg/kg	6	NS	NS	0.013 U	0.019 U	0.036	0.02	0.014 U	0.018 U	0.015	
	Carbon disulfide	mg/kg	100	NS	NS	0.0051 U	0.0077 U	0.0083 U	0.0076 U	0.0057 U	0.0072 U	0.0052 U	
	2-Butanone	mg/kg	4	NS	NS	0.0051 U	0.0077 U	0.0083 U	0.0076 U	0.0057 U	0.0072 U	0.0052 U	
	4-Methyl-2-pentanone	mg/kg	0.4	NS	NS	0.0051 U	0.0077 U	0.0083 U	0.0076 U	0.0057 U	0.0072 U	0.0052 U	
	2-Hexanone	mg/kg	100	NS	NS	0.0051 U	0.0077 U	0.0083 U	0.0076 U	0.0057 U	0.0072 U	0.0052 U	
	Bromochloromethane	mg/kg	NS	NS	NS	0.0010 U	0.0015 U	0.0017 U	0.0015 U	0.0011 U	0.0014 U	0.0010 U	
	Tetrahydrofuran	mg/kg	500	NS	NS	0.0020 U	0.0031 U	0.0033 U	0.0030 U	0.0023 U	0.0029 U	0.0021 U	
	2,2-Dichloropropane	mg/kg	0.1(3)	NS	NS	0.0010 U	0.0015 U	0.0017 U	0.0015 U	0.0011 U	0.0014 U	0.0010 U	
	1,2-Dibromoethane	mg/kg	0.1	NS	NS	0.00051 U	0.00077 U	0.00083 U	0.00076 U	0.00057 U	0.00072 U	0.00052 U	
	1,3-Dichloropropane	mg/kg	500	NS	NS	0.0010 U	0.0015 U	0.0017 U	0.0015 U	0.0011 U	0.0014 U	0.0010 U	
	1,1,1,2-Tetrachloroethane	mg/kg	0.1	NS	NS	0.00026 U	0.00038 U	0.00042 U	0.00038 U	0.00028 U	0.00036 U	0.00026 U	
	Bromobenzene	mg/kg	100	NS	NS	0.0010 U	0.0015 U	0.0017 U	0.0015 U	0.0011 U	0.0014 U	0.0010 U	
	n-Butylbenzene	mg/kg	100(1)	NS	NS	0.00051 U	0.00077 U	0.00083 U	0.00076 U	0.00057 U	0.00072 U	0.00052 U	
	sec-Butylbenzene	mg/kg	100(1)	NS	NS	0.00051 U	0.00077 U	0.00083 U	0.00076 U	0.00057 U	0.00072 U	0.00052 U	
	tert-Butylbenzene	mg/kg	100	NS	NS	0.0010 U	0.0015 U	0.0017 U	0.0015 U	0.0011 U	0.0014 U	0.0010 U	
	o-Chlorotoluene	mg/kg	100	NS	NS	0.0010 U	0.0015 U	0.0017 U	0.0015 U	0.0011 U	0.0014 U	0.0010 U	
	p-Chlorotoluene	mg/kg	100(5)	NS	NS	0.0010 U	0.0015 U	0.0017 U	0.0015 U	0.0011 U	0.0014 U	0.0010 U	
	1,2-Dibromo-3-chloropropane	mg/kg	10	NS	NS	0.0015 U	0.0023 U	0.0025 U	0.0023 U	0.0017 U	0.0022 U	0.0016 U	
	Hexachlorobutadiene	mg/kg	30	NS	NS	0.0020 U	0.0031 U	0.0033 U	0.0030 U	0.0023 U	0.0029 U	0.0021 U	
	Isopropylbenzene	mg/kg	1,000	NS	NS	0.00051 U	0.00077 U	0.00083 U	0.00076 U	0.00057 U	0.00072 U	0.00052 U	
	p-Isopropyltoluene	mg/kg	100	NS	NS	0.00051 U	0.00077 U	0.00083 U	0.00076 U	0.00057 U	0.00072 U	0.00052 U	
	Naphthalene	mg/kg	4	NS	NS	0.0020 U	0.0031 U	0.0033 U	0.0030 U	0.0023 U	0.0029 U	0.0021 U	
	n-Propylbenzene	mg/kg	100	NS	NS	0.00051 U	0.00077 U	0.00083 U	0.00076 U	0.00057 U	0.00072 U	0.00052 U	
	1,2,3-Trichlorobenzene	mg/kg	NS	NS	NS	0.0010 U	0.0015 U	0.0017 U	0.0015 U	0.0011 U	0.0014 U	0.0010 U	
	1,2,4-Trichlorobenzene	mg/kg	2	NS	NS	0.0010 U	0.0015 U	0.0017 U	0.0015 U	0.0011 U	0.0014 U	0.0010 U	
	1,3,5-Trimethylbenzene	mg/kg	10	NS	NS	0.0010 U	0.0015 U	0.0017 U	0.0015 U	0.0011 U	0.0014 U	0.0010 U	
	1,2,4-Trimethylbenzene	mg/kg	1,000	NS	NS	0.0010 U	0.0015 U	0.0017 U	0.0015 U	0.0011 U	0.0014 U	0.0010 U	
	Ethyl ether	mg/kg	100	NS	NS	0.0010 U	0.0015 U	0.0017 U	0.0015 U	0.0011 U	0.0014 U	0.0010 U	
	Isopropyl Ether	mg/kg	100	NS	NS	0.0010 U	0.0015 U	0.0017 U	0.0015 U	0.0011 U	0.0014 U	0.0010 U	
	Ethyl-Tert-Butyl-Ether	mg/kg	NS	NS	NS	0.0010 U	0.0015 U	0.0017 U	0.0015 U	0.0011 U	0.0014 U	0.0010 U	
	Tertiary-Amyl Methyl Ether	mg/kg	NS	NS	NS	0.0010 U	0.0015 U	0.0017 U	0.0015 U	0.0011 U	0.0014 U	0.0010 U	
	1,4-Dioxane	mg/kg	0.2	NS	NS	0.041 U	0.062 U	0.066 U	0.061 U	0.045 U	0.058 U	0.042 U	
	Total VOCs	mg/kg	NS	4	10	0.0003	0.003	0.037	0.021	0.0004	0.004	0.015	
SVOCs													
	Acenaphthene	mg/kg	4	NS	NS	0.15 U	0.15 U	0.16 U	0.14 U	0.14 U	0.14 U	0.14 U	
	1,2,4-Trichlorobenzene	mg/kg	2	NS	NS	0.19 U	0.19 U	0.2 U	0.18 U	0.18 U	0.17 U	0.18 U	
	Hexachlorobenzene	mg/kg	0.7	NS	NS	0.081 U	0.08 U	0.082 U	0.076 U	0.074 U	0.073 U	0.075 U	
	Bis(2-chloroethyl)ether	mg/kg	0.7	NS	NS	0.081 U	0.08 U	0.082 U	0.076 U	0.074 U	0.073 U	0.075 U	
	2-Chloronaphthalene	mg/kg	1,000	NS	NS	0.19 U	0.19 U	0.2 U	0.18 U	0.18 U	0.17 U	0.18 U	
	1,2-Dichlorobenzene	mg/kg	9	NS	NS	0.19 U	0.19 U	0.2 U	0.18 U	0.18 U	0.17 U	0.18 U	
	1,3-Dichlorobenzene	mg/kg	3	NS	NS	0.19 U	0.19 U	0.2 U	0.18 U	0.18 U	0.17 U	0.18 U	
	1,4-Dichlorobenzene	mg/kg	0.7	NS	NS	0.081 U	0.08 U	0.082 U	0.076 U	0.074 U	0.073 U	0.075 U	
	3,3'-Dichlorobenzidine	mg/kg	3	NS	NS	0.19 U	0.19 U	0.2 U	0.18 U	0.18 U	0.1		

Table 2 - Soil Characterization Analytical Results
Washington Street - RTN 3-34742
Somerville, Massachusetts

Sample Location:						GLC-VMF(48)- RCS-2-FILL(48)		GLC-WASHPS				GLC- OSCDRILLSPOIL LS		GLC-VMF(20)- RCS-1-FILL(16)		GLC-100IB-(0-3)		GLC-NP-314-15	
						GLC-VMF(48)- RCS-2-FILL(48)- DC-COMP/GLC- VMF(48)-RCS-2- FILL(48)-DC-VOC- 7		GLC-WASHPS- 40821-DC-COMP (0-2)GLC- WASHPS-40821- DC-VOC (1-2)		GLC-WASHPS- 041221-DC- COMP/GLC- WASHPS-041221- DC-VOC-6		OSCDRILLSPOIL S-210329-DC- COMP/GLC- OSCDRILLSPOIL S-210329-DC-VOC- 8		GLC-VMF(20)- RCS-1-FILL(16)- DC-COMP/GLC- VMF(20)-RCS-1- FILL(16)-DC-VOC- 2		GLC-100IB-(0-3)- 041521-DC- COMP/GLC-100IB- (0-3)-041521-DC- VOC-3		GLC-NP-314-15- DC-COMP/GLC- NP-314-15-DC- VOC(4)	
						Sample Name*: N/A/7 ft		Sample Depth*: 0-2/1-2 ft		Sample Date: 4/6/2021		N/A/8 ft		N/A/2 ft		N/A/3 ft		N/A/4 ft	
						4/6/2021		4/8/2021		4/23/2021		4/23/2021		4/28/2021		4/28/2021		6/10/2021	
Analysis	Analyte	Unit	RCS-1	Unlined Landfill*	Lined Landfill*														
PCBs																			
	Aroclor-1016	mg/kg	1	NS	NS	0.0391	U	0.0368	U	0.0387	U	0.0346	U	0.0357	U	0.0349	U	0.0362	U
	Aroclor-1221	mg/kg	1	NS	NS	0.0391	U	0.0368	U	0.0387	U	0.0346	U	0.0357	U	0.0349	U	0.0362	U
	Aroclor-1232	mg/kg	1	NS	NS	0.0391	U	0.0368	U	0.0387	U	0.0346	U	0.0357	U	0.0349	U	0.0362	U
	Aroclor-1242	mg/kg	1	NS	NS	0.0391	U	0.0368	U	0.0387	U	0.0346	U	0.0357	U	0.0349	U	0.0362	U
	Aroclor-1248	mg/kg	1	NS	NS	0.0391	U	0.0368	U	0.0387	U	0.0346	U	0.0357	U	0.0349	U	0.0362	U
	Aroclor-1254	mg/kg	1	NS	NS	0.0606		0.0368	U	0.0387	U	0.0346	U	0.0794		0.0451		0.0362	U
	Aroclor-1260	mg/kg	1	NS	NS	0.0391	U	0.0368	U	0.0387	U	0.0346	U	0.0357	U	0.0349	U	0.0362	U
	Aroclor-1262	mg/kg	1	NS	NS	0.0391	U	0.0368	U	0.0387	U	0.0346	U	0.0357	U	0.0349	U	0.0362	U
	Aroclor-1268	mg/kg	1	NS	NS	0.0391	U	0.0368	U	0.0387	U	0.0346	U	0.0357	U	0.0349	U	0.0362	U
	Total PCBs	mg/kg	1	2	2	0.0606		0.0368	U	0.0387	U	0.0346	U	0.0794		0.0451		0.0362	U
Pesticides																			
	Delta-BHC	mg/kg	10	NS	NS	0.00183	U	0.00184	U	0.00177	U	0.00170	U	0.00168	U	0.00169	U	0.00172	U
	Lindane	mg/kg	0.003	NS	NS	0.000609	U	0.000614	U	0.000590	U	0.000566	U	0.000560	U	0.000564	U	0.000575	U
	Alpha-BHC	mg/kg	50	NS	NS	0.000761	U	0.000767	U	0.000738	U	0.000707	U	0.000701	U	0.000704	U	0.000719	U
	Beta-BHC	mg/kg	10	NS	NS	0.00183	U	0.00184	U	0.00177	U	0.00170	U	0.00168	U	0.00169	U	0.00172	U
	Heptachlor	mg/kg	0.3	NS	NS	0.000913	U	0.000920	U	0.000886	U	0.000848	U	0.000841	U	0.000845	U	0.000862	U
	Aldrin	mg/kg	0.08	NS	NS	0.00183	U	0.00184	U	0.00177	U	0.00170	U	0.00168	U	0.00169	U	0.00172	U
	Heptachlor epoxide	mg/kg	0.1	NS	NS	0.00342	U	0.00345	U	0.00332	U	0.00318	U	0.00315	U	0.00317	U	0.00323	U
	Endrin	mg/kg	10	NS	NS	0.000761	U	0.000767	U	0.000738	U	0.000707	U	0.000701	U	0.000704	U	0.000719	U
	Endrin ketone	mg/kg	NS	NS	NS	0.00183	U	0.00184	U	0.00177	U	0.00170	U	0.00168	U	0.00169	U	0.00172	U
	Dieldrin	mg/kg	0.08	NS	NS	0.00114	U	0.00115	U	0.00111	U	0.00106	U	0.00105	U	0.00106	U	0.00108	U
	4,4'-DDE	mg/kg	6	NS	NS	0.00183	U	0.00184	U	0.00177	U	0.00170	U	0.00348		0.00210	P	0.00172	U
	4,4'-DDD	mg/kg	8	NS	NS	0.00183	U	0.00184	U	0.00177	U	0.00170	U	0.00518		0.00316		0.00236	
	4,4'-DDT	mg/kg	6	NS	NS	0.00342	U	0.00345	U	0.00332	U	0.00318	U	0.0103	P	0.00317	U	0.0102	P
	Endosulfan I	mg/kg	0.5	NS	NS	0.00183	U	0.00184	U	0.00177	U	0.00170	U	0.00168	U	0.00169	U	0.00172	U
	Endosulfan II	mg/kg	0.5	NS	NS	0.00183	U	0.00184	U	0.00177	U	0.00170	U	0.00168	U	0.00169	U	0.00172	U
	Endosulfan sulfate	mg/kg	0.5	NS	NS	0.000761	U	0.000767	U	0.000738	U	0.000707	U	0.000701	U	0.000704	U	0.000719	U
	Methoxychlor	mg/kg	200	NS	NS	0.00342	U	0.00345	U	0.00332	U	0.00318	U	0.00315	U	0.00317	U	0.00323	U
	Chlordane	mg/kg	0.7	NS	NS	0.0152	U	0.0153	U	0.0148	U	0.0141	U	0.0140	U	0.0141	U	0.0144	U
	Hexachlorobenzene	mg/kg	0.7	NS	NS	0.00183	U	0.00184	U	0.00177	U	0.00170	U	0.00168	U	0.00169	U	0.00172	U
Herbicides																			
	MCPP	mg/kg	NS	NS	NS	3.9	U	3.8	U	3.9	U	3.5	U	3.6	U	3.5	U	3.6	U
	MCPA	mg/kg	100	NS	NS	3.9	U	3.8	U	3.9	U	3.5	U	3.6	U	3.5	U	3.6	U
	Dalapon	mg/kg	1,000	NS	NS	0.039	U	0.038	U	0.039	U	0.035	U	0.036	U	0.035	U	0.036	U
	Dicamba	mg/kg	500	NS	NS	0.039	U	0.038	U	0.039	U	0.035	U	0.036	U	0.035	U	0.036	U
	Dichloroprop	mg/kg	NS	NS	NS	0.039	U	0.038	U	0.039	U	0.035	U	0.036	U	0.035	U	0.036	U
	2,4-D	mg/kg	100	NS	NS	0.039	U	0.038	U	0.039	U	0.035	U	0.036	U	0.035	U	0.036	U
	2,4-DB	mg/kg	100	NS	NS	0.039	U	0.038	U	0.039	U	0.035	U	0.036	U	0.035	U	0.036	U
	2,4,5-T	mg/kg	100	NS	NS	0.039	U	0.038	U	0.039	U	0.035	U	0.036	U	0.035	U	0.036	U
	2,4,5-TP (Silvex)	mg/kg	100	NS	NS	0.039	U	0.038	U	0.039	U	0.035	U	0.036	U	0.035	U	0.036	U
TPH																			
	Total Petroleum Hydrocarbons C10-C36	mg/kg	1,000	2,500	5,000	39.3	U	75.4		65.7		64.1		48.8		107		682	
Metals, total																			
	Antimony	mg/kg	20	NS	NS	2.33	U	2.19	U	2.26	U	2.09	U	2.10	U	2.06	U	2.13	U
	Arsenic	mg/kg	20	40	40	5.50		2.58		7.48		6.68		2.24		1.64		7.25	
	Barium	mg/kg	1,000	NS	NS	51.0		35.8		41.5		35.1		46.4		51.7			
	Beryllium	mg/kg	90	NS	NS	0.270		0.373		0.226	U	0.209	U	0.315		0.362		0.392	
	Cadmium	mg/kg	70	30	80	0.536		0.439	U	0.488		0.418		0.420	U	0.486		0.537	
	Chromium	mg/kg	100	1,000	1,000	22.0		9.72		19.3		19.4		20.5		24.3		16.1	
	Lead	mg/kg	200	1,000	2,000	18.8		27.6		78.8		87.7		20.7		25.8		133	
	Mercury	mg/kg	20	10	10	0.086	U	0.078	U	0.252		0.090		0.134		0.199		0.242	
	Nickel	mg/kg	600	NS	NS	17.7		7.44		14.0		11.3		15.8		15.4		11.9	
	Selenium	mg/kg	400	NS	NS	2.33	U	2.19	U	2.26	U	2.09	U	2.10	U	2.06	U	2.13	U
	Silver	mg/kg	100	NS	NS	0.466	U	0.439	U	0.451	U	0.418	U	0.420	U	0.412	U	0.426	U
	Thallium	mg/kg	8	NS	NS	2.33	U	2.19	U	2.26	U	2.09	U	2.10	U	2.06	U	2.13	U
	Vanadium	mg/kg	400	NS	NS	49.2		12.0		24.8		25.8		43.9		45.8		25.0	
	Zinc	mg/kg	1,000	NS	NS	43.6		21.1		75.7		48.7		56.8		71.0		123	
Metals, TCLP																			
	Lead	mg/L	5**	NS	NS	NA		NA		NA		NA		NA		NA		0.500	U
General Chemistry																			
	Ignitability		NS	NS	NS	NI		NI		NI		NI		NI		NI		NI	
	Reactive Cyanide	mg/kg	NS	< 250	< 250	10	U	10	U	10	U	10	U	10	U	10	U	10	U
	Reactive Sulfide	mg/kg	NS	< 500	< 500	10	U	10	U	10	U	10	U	10	U	10	U	10	U
	pH	su	NS	>2 <12.5	>2 <12.5	8.5		8.3		8.6		8.2		8.1		8.3		8.4	
	Specific conductance	umhos/cm																	

TABLE 1
SOIL SAMPLING SUMMARY

<u>Collection Date</u>	<u>Collection Method</u>	<u>Disposal Sample ID(s)</u>	<u>Receiving Facility or Anticipated Receiving Facility</u>	<u>Disposal Package (Approval Number)</u>
10/7/2021	Stockpile	GLC-NP-306A-18-C-DC-COMP GLC-NP-306A-18-C-DC-VOC-7	Niagara	Niagara No. 6
10/22/2021	Stockpile	GLC-WSPTOPCLEAN-DC-COMP GLC-WSPTOPCLEAN-DC-VOC-7	Lynn	Lynn No. 2 Amendment #4
11/9/2021	Stockpile	GLC-WASHPSSED102221-DC-COMP GLC-WASHPSSED102221-DC-VOC-3	Lynn	Lynn No. 2 Amendment #5
11/11/2021	Stockpile	GLC-NP-318B-02-DC-COMP GLC-NP-318B-02-DC-VOC-4	Heritage	Heritage No. 2 Amendment #4
12/20/2021	Stockpile	GLC-WASHPS20211213-DC-COMP GLC-WASHPS20211213-DC-VOC-06	Lynn	Lynn No. 2 Amendment #6
1/12/2022	Stockpile	GLC-WASHPUMP20210805RU-COMP GLC-WASHPUMP20210805RU-VOC(5)	Lynn	Lynn No. 2 Amendment #7

Receiving Facilities: Lynn Landfill Company, LLC. - Marine Boulevard to 25 Riley Way Extension, Lynn, MA 01905
Allied Niagara Falls Landfill – 5600 Niagara Fall Boulevard, Niagara Falls, NY 14304
Heritage Environmental Services – 4370 W. County Road 1275 N., Roachdale, IN 46172

Table 2 -- Soil Characterization Analytical Results -- October, November, and December 2021 and January 2022
Washington Street
MBTA Green Line Extension Project

[illegible]

Washington Street
MBTA Green Line Extension Project

Analysis	Analyte	Unit	Sample Location:			GLC-NP-306A-18-C-DC	GLC-WASHPSSED-	GLC-WSTOPCLEA	NP-318B-02-DC	WASHPS2011-213-DC	WASHPUMP20-21080SRU-GLC																													
			RCS-1	Unlined Landfill*	Lined Landfill*	GLC-NP-306A-18-C-DC-COMP/GLC-NP-306A-18-C-DC-VOC-7	GLC-WASHPSSED10-2221-DC-COMP/GLC-WASHPSSED10-2221-DC-VOC-3	GLC-WSTOPCLEA-N-DC-COMP/GLC-WSTOPCLEA-N-DC-COMP/GLC-NP-318B-02-DC-VOC-4	GLC-NP-318B-02-DC-COMP/GLC-NP-318B-02-DC-VOC-4	GLC-WASHPS2011-213-DC-COMP/GLC-WASHPS2011-213-DC-VOC-6	GLC-WASHPUMP20-21080SRU-COMP/GLC-WASHPUMP20-21080SRU-VOC (5)																													
						Sample Name: L2154830-05/06/L2155291-02					L215892-01/02					L2162117/01/02					L217005-01/02					L2201603-01/02														
						Lab Sample ID**					N/A/7 R					N/A/3 R					N/A/7 R					N/A/4 R					N/A/6 R					N/A/5 R				
						Sample Date:					10/7/2021					11/9/2021					10/22/2021					11/1/2021					12/20/2021					1/12/2022				
Analysis	Analyte	Unit	RCS-1	Unlined Landfill*	Lined Landfill*																																			
SVOCs	Aceanaphthene	mg/kg	4	NS	NS	6.2		0.28	U	0.15	U	0.15	U	0.22		0.53	U																							
	1,2,4-Trichlorobenzene	mg/kg	2	NS	NS	0.92	U	0.35	U	0.19	U	0.18	U	0.22	U	0.67	U																							
	Hexachlorobenzene	mg/kg	0.7	NS	NS	0.39	U	0.15	U	0.079	U	0.077	U	0.093	U	0.28	U																							
	Bis(2-chloroethyl)ether	mg/kg	0.7	NS	NS	0.39	U	0.15	U	0.079	U	0.077	U	0.093	U	0.28	U																							
	2-Chloronaphthalene	mg/kg	1,000	NS	NS	0.92	U	0.35	U	0.19	U	0.18	U	0.22	U	0.67	U																							
	1,2-Dichlorobenzene	mg/kg	9	NS	NS	0.92	U	0.35	U	0.19	U	0.18	U	0.22	U	0.67	U																							
	1,3-Dichlorobenzene	mg/kg	3	NS	NS	0.92	U	0.35	U	0.19	U	0.18	U	0.22	U	0.67	U																							
	1,4-Dichlorobenzene	mg/kg	0.7	NS	NS	0.39	U	0.15	U	0.079	U	0.077	U	0.093	U	0.28	U																							
	3,3'-Dichlorobenzidine	mg/kg	3	NS	NS	0.92	U	0.35	U	0.19	U	0.18	U	0.22	U	0.67	U																							
	2,4-Dinitrotoluene	mg/kg	0.7	NS	NS	0.39	U	0.15	U	0.079	U	0.077	U	0.093	U	0.28	U																							
	2,6-Dinitrotoluene	mg/kg	100	NS	NS	0.92	U	0.35	U	0.19	U	0.18	U	0.22	U	0.67	U																							
	Azobenzene	mg/kg	NS	NS	NS	0.92	U	0.35	U	0.19	U	0.18	U	0.22	U	0.67	U																							
	Fluoranthene	mg/kg	1,000	NS	NS	0.92	U	0.35	U	1.8	U	1.1	U	3.5	U	1.1	U																							
	4-Bromophenyl phenyl ether	mg/kg	100	NS	NS	0.92	U	0.35	U	0.19	U	0.18	U	0.22	U	0.67	U																							
	Bis(2-chloroisopropyl) ether	mg/kg	0.7	NS	NS	0.39	U	0.15	U	0.079	U	0.077	U	0.093	U	0.28	U																							
	Bis(2-chloroisobutyl) methane	mg/kg	500	NS	NS	1	U	0.38	U	0.2	U	0.2	U	0.24	U	0.72	U																							
	Hexachlorobutadiene	mg/kg	30	NS	NS	0.92	U	0.35	U	0.19	U	0.18	U	0.22	U	0.67	U																							
	Hexachloroethane	mg/kg	0.7	NS	NS	0.39	U	0.15	U	0.079	U	0.077	U	0.093	U	0.28	U																							
	Isochlorane	mg/kg	100	NS	NS	0.83	U	0.31	U	0.17	U	0.16	U	0.2	U	0.6	U																							
	Naphthalene	mg/kg	4	NS	NS	11		0.42	0.34		0.18	U	0.51		0.67	U																								
	Nitrobenzene	mg/kg	500	NS	NS	0.83	U	0.31	U	0.17	U	0.16	U	0.2	U	0.6	U																							
	Bis(2-Ethylhexyl)phthalate	mg/kg	90	NS	NS	0.92	U	0.35	U	0.19	U	0.18	U	0.22	U	0.67	U																							
	Butyl benzyl phthalate	mg/kg	100	NS	NS	0.92	U	0.35	U	0.19	U	0.18	U	0.22	U	0.67	U																							
	Di-n-butylphthalate	mg/kg	50	NS	NS	0.92	U	0.35	U	0.19	U	0.18	U	0.22	U	0.67	U																							
	Di-n-octylphthalate	mg/kg	1,000	NS	NS	0.92</																																		

Table 2 -- Soil Characterization Analytical Results -- October, November, and December 2021 and January 2022
Washington Street
MBTA Green Line Extension Project

Sample Location:						GLC-NP-306A-18-C-DC		GLC-WASHPSSED-18-C-DC		GLC-WSPTOPCLEA-18-C-DC		NP-318B-02-DC		WASHPS20211-213-DC		WASHPUMP20-210805RU-GLC-	
Sample Name:						GLC-NP-306A-18-C-DC-COMP/CLC-NP-306A-18-C-DC-VOC-7		GLC-WASHPSSED10-2221-DC-COMP/CLC-WASHPSSED10-2221-DC-VOC-3		GLC-WSPTOPCLEA-N-DC-COMP/CLC-WSPTOPCLEA-N-DC-VOC-7		GLC-NP-318B-02-DC-COMP/CLC-NP-318B-02-DC-VOC-4		GLC-WASHPS20211-213-DC-COMP/CLC-WASHPS20211-213-DC-VOC-06		GLC-WASHPUMP20-210805RU-COMP/CLC-WASHPUMP20-210805RU-VOC-5	
Lab Sample ID:						L2154830-05/06/L2155291-02		L2161496-01/02		L2158092-01/02		L2162117-01/02		L2170050-01/02		L2201603-01/02	
Sample Depth:						N/A/7 ft		N/A/3 ft		N/A/7 ft		N/A/4 ft		N/A/6 ft		N/A/5 ft	
Sample Date:						10/7/2021		11/9/2021		10/22/2021		11/11/2021		12/20/2021		1/12/2022	
Analysis	Analyte	Unit	RCS-1	Unlined Landfill*	Lined Landfill*												
Pesticides																	
	Delta-BHC	mg/kg	10	NS	NS	0.0176	U	0.00325	U	0.00176	U	0.00173	U	0.00594	U	0.00231	U
	Lindane	mg/kg	0.003	NS	NS	0.00588	U	0.00108	U	0.000587	U	0.000577	U	0.00198	U	0.000771	U
	Alpha-BHC	mg/kg	50	NS	NS	0.00735	U	0.00136	U	0.000733	U	0.000721	U	0.00247	U	0.000964	U
	Beta-BHC	mg/kg	10	NS	NS	0.0176	U	0.00325	U	0.00176	U	0.00173	U	0.00594	U	0.00231	U
	Heptachlor	mg/kg	0.3	NS	NS	0.00882	U	0.00163	U	0.000880	U	0.000866	U	0.00297	U	0.00116	U
	Aldrin	mg/kg	0.08	NS	NS	0.0176	U	0.00325	U	0.00176	U	0.00173	U	0.00594	U	0.00231	U
	Heptachlor epoxide	mg/kg	0.1	NS	NS	0.0331	U	0.00610	U	0.00330	U	0.00325	U	0.0111	U	0.00434	U
	Endrin	mg/kg	10	NS	NS	0.00735	U	0.00136	U	0.000733	U	0.000721	U	0.00247	U	0.000964	U
	Endrin ketone	mg/kg	10	NS	NS	0.0176	U	0.00325	U	0.00176	U	0.00173	U	0.00594	U	0.00231	U
	Dieldrin	mg/kg	0.08	NS	NS	0.0110	U	0.00203	U	0.00110	U	0.00108	U	0.00371	U	0.00144	U
	4,4'-DDE	mg/kg	6	NS	NS	0.0176	U	0.00325	U	0.00176	U	0.00173	U	0.00594	U	0.00231	U
	4,4'-DDD	mg/kg	8	NS	NS	0.0176	U	0.00325	U	0.00176	U	0.00173	U	0.00594	U	0.00231	U
	4,4'-DDT	mg/kg	6	NS	NS	0.0397		0.00652		0.00330	U	0.00342	IP	0.0111	U	0.00434	U
	Endosulfan I	mg/kg	0.5	NS	NS	0.0176	U	0.00325	U	0.00176	U	0.00173	U	0.00594	U	0.00231	U
	Endosulfan II	mg/kg	0.5	NS	NS	0.0176	U	0.00325	U	0.00176	U	0.00173	U	0.00594	U	0.00231	U
	Endosulfan sulfate	mg/kg	0.5	NS	NS	0.00735	U	0.00136	U	0.000733	U	0.000721	U	0.00247	U	0.000964	U
	Methoxychlor	mg/kg	200	NS	NS	0.0331	U	0.00610	U	0.00330	U	0.00325	U	0.0111	U	0.00434	U
	Chlordane	mg/kg	0.7	NS	NS	0.147	U	0.0271	U	0.0147	U	0.0144	U	0.0495	U	0.0193	U
	Hexachlorobenzene	mg/kg	0.7	NS	NS	0.0176	U	0.00325	U	0.00176	U	0.00173	U	0.00594	U	0.00231	U
Herbicides																	
	MCPP	mg/kg	NS	NS	NS	3.7	U	7	U	3.8	U	3.7	U	4.5	U	4.7	U
	MCPA	mg/kg	100	NS	NS	3.7	U	7	U	3.8	U	3.7	U	4.5	U	4.7	U
	Dalapon	mg/kg	1,000	NS	NS	0.037	U	0.07	U	0.038	U	0.037	U	0.045	U	0.047	U
	Dicamba	mg/kg	500	NS	NS	0.037	U	0.07	U	0.038	U	0.037	U	0.045	U	0.047	U
	Dichloroprop	mg/kg	NS	NS	NS	0.037	U	0.07	U	0.038	U	0.037	U	0.045	U	0.047	U
	2,4-D	mg/kg	100	NS	NS	0.037	U	0.07	U	0.038	U	0.037	U	0.045	U	0.047	U
	2,4-DB	mg/kg	100	NS	NS	0.037	U	0.07	U	0.038	U	0.037	U	0.045	U	0.047	U
	2,4,5-T	mg/kg	100	NS	NS	0.037	U	0.07	U	0.038	U	0.037	U	0.045	U	0.047	U
	2,4,5-TP (Silvex)	mg/kg	100	NS	NS	0.037	U	0.07	U	0.038	U	0.037	U	0.045	U	0.047	U
TPH																	
	Total Petroleum Hydrocarbons	mg/kg	1,000	2,500	5,000	4,340		174		408		120		2,160		770	
Metals, total																	
	Antimony	mg/kg	20	NS	NS	2.19	U	4.18	U	2.24	U	2.13	U	2.59	U	2.82	U
	Arsenic	mg/kg	20	40	40	5.36		9.18		3.44		3.85		5.11		5.55	
	Barium	mg/kg	1,000	NS	NS	38.0		92.1		24.1		35.8		39.8		53.4	
	Beryllium	mg/kg	90	NS	NS	0.237		0.619		0.287		0.255		0.301		0.366	
	Cadmium	mg/kg	70	30	80	0.657		1.08		0.449	U	0.425	U	0.518	U	0.564	U
	Chromium	mg/kg	100	1,000	1,000	12.1		37.3		16.0		12.7		16.9		20.3	
	Cobalt	mg/kg	200	1,000	2,000	134		80.9		38.9		60.5		91.7		72.9	
	Mercury	mg/kg	20	10	10	0.187		0.152	U	0.093		0.191		0.445		0.207	
	Nickel	mg/kg	600	NS	NS	9.30		25.9		10.9		10.2		12.2		14.5	
	Selenium	mg/kg	400	NS	NS	2.19	U	4.18	U	2.24	U	2.13	U	2.59	U	2.82	U
	Silver	mg/kg	100	NS	NS	0.438	U	0.837	U	0.449	U	0.425	U	0.518	U	0.564	U
	Thallium	mg/kg	8	NS	NS	2.19	U	4.18	U	2.24	U	2.13	U	2.59	U	2.82	U
	Vanadium	mg/kg	400	NS	NS	22.9		50.1		29.8		16.6		24.6		27.6	
	Zinc	mg/kg	1,000	NS	NS	160		148		67.6		62.6		96.5		101	
Metals, TCLP																	
	Lead	mg/L	5**	NS	NS	0.500	U	NA		NA		NA		NA		NA	
General Chemistry																	
	Ignitability		NS	NS	NS	NI		NI		NI		NI		NI		NI	
	Specific Conductance	umhos/cm	NS	4,000	8,000	110		110		68		93		110		86	
	pH	su	NS	2 - 12.5	2 - 12.5	7.6		8.2		8.0		8.2		7.4		7.4	
	Reactive Cyanide	mg/kg	NS	< 250	< 250	10	U	10	U	10	U	10	U	10	U	10	U
	Reactive Sulfide	mg/kg	NS	< 500	< 500	10	U	10	U	10	U	10	U	10	U	10	U

Notes:

mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).

mg/L - milligrams per liter.

su - Standard unit.

umhos/cm - Micro-mhos per centimeter.

1 - The lower value for the two columns has been reported due to obvious interference.

NA - Sample not analyzed for the listed analyte.

N/A - Not applicable/available.

NI - Not ignitable.

NS - No MassDEP standards exist for this analyte.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

U - Analyte was not detected at specified quantitation limit.

Values in bold indicate the analyte was detected.

Values shown in bold and shaded type exceed one or more of the listed MassDEP standards/criteria.

VOCs - Volatile Organic Compounds.

** - Reuse and Disposal of Contaminated Soil at Massachusetts Landfills, MassDEP Policy # COMM-97-001, August 1997.

** - EPA SW-846 Chapter 7, Table 7-1, Maximum Concentration of Contaminants for Toxicity Characteristic.

SVOCs - Semivolatile Organic Compounds.

PCBs - Polychlorinated Biphenyls.

RC - Reportable concentration.

TPH - Total Petroleum Hydrocarbons.

(1) - Value for C9-C10 aromatic used.

(2) - Criteria applicable to xylene (total), the sum of the xylene isomers.

(3) - Value for Dichloropropane used.

(4) - Value for Dichloropropene used.

(5) - Value for Chlorobenzene used.

< - Sample name for Other/VOC analysis.

<> - Lab Sample ID for Other/VOC/TCLP analysis; otherwise Lab Sample ID applied to Other/VOC analysis.

Table 2 - Soil Characterization Analytical Results
MBTA Green Line Extension Project
132 Washington Street
Somerville, Massachusetts
Release Tracking Number 3-34742
March 2022 - August 2022

LOCATION										GLC-WASHPUMPGAS030222-DC-COMP		GLC-WASHPUMPGAS030222-DC-VOC(1)		
SAMPLING DATE										3/11/2022		3/11/2022		
LAB SAMPLE ID										22C1091-01		22C1091-02		
SAMPLE TYPE										SOIL		SOIL		
	CasNum	MA-BLNS	RCS-1-14	RCS-2-14	BUD-S3/G3	MA-LLAND	MA-ULAND	Saugus	TRC-SSSR-GLX	Units	Results	Qual	Results	Qual
General Chemistry														
Specific Conductance @ 25 C	SC					8000	4000	2000		umhos/cm	30		-	-
Solids, Total	TSOLIDS									%	87.0		87.0	
pH (H)	12408-02-5							5-9	2-12.5	SU	8.8		-	-
Cyanide, Reactive	GIS-250-012							250	250	mg/kg	3.9	U	-	-
Sulfide, Reactive	RSULF							500	500	mg/kg	19	U	-	-
Ignitability of Solids														
Ignitability	IGNIT							>140°	NI		Absent		-	-
MCP Chlorinated Herbicides														
2,4-D	94-75-7		100	1000				10		mg/kg	0.11	U	-	-
2,4-DB	94-82-6		100	1000				10		mg/kg	0.11	U	-	-
2,4,5-TP (Silvex)	93-72-1		100	1000				10		mg/kg	0.011	U	-	-
2,4,5-T	93-76-5		100	1000				10		mg/kg	0.011	U	-	-
Dalapon	75-99-0		1000	10000				100		mg/kg	0.29	U	-	-
Dicamba	1918-00-9		500	5000				50		mg/kg	0.011	U	-	-
Dichloroprop	120-36-5							0.08		mg/kg	0.11	U	-	-
MCPA	94-74-6		100	1000				10		mg/kg	11	U	-	-
MCPP	93-65-2							3.3		mg/kg	11	U	-	-
MCP Organochlorine Pesticides														
Aldrin	309-00-2		0.08	0.5	0.7			0.05		mg/kg	0.11	U	-	-
Alpha-BHC	319-84-6		50	500				5		mg/kg	0.11	U	-	-
Beta-BHC	319-85-7		10	100				1		mg/kg	0.11	U	-	-
Delta-BHC	319-86-8		10	100				1		mg/kg	0.11	U	-	-
Lindane	58-89-9		0.003	0.5	0.46			0.0003		mg/kg	0.046	U	-	-
Chlordane	57-74-9		0.7	30	27			0.07		mg/kg	0.46	U	-	-
4,4'-DDD	72-54-8		8	40	14			0.8		mg/kg	0.092	U	-	-
4,4'-DDE	72-55-9		6	30	14			0.6		mg/kg	0.092	U	-	-
4,4'-DDT	50-29-3		6	30	14			0.6		mg/kg	0.092	U	-	-
Dieldrin	60-57-1		0.08	0.5	1			0.05		mg/kg	0.092	U	-	-
Endosulfan I	959-98-8		0.5	1	1.2			0.05		mg/kg	0.11	U	-	-
Endosulfan II	33213-65-9		0.5	1	1.2			0.05		mg/kg	0.18	U	-	-
Endosulfan sulfate	1031-07-8							0.008		mg/kg	0.18	U	-	-
Endrin	72-20-8		10	20	7			1		mg/kg	0.18	U	-	-
Endrin ketone	53494-70-5							0.008		mg/kg	0.18	U	-	-
Heptachlor	76-44-8		0.3	2	4.2			0.03		mg/kg	0.11	U	-	-
Heptachlor epoxide	1024-57-3		0.1	0.9	0.35			0.01		mg/kg	0.11	U	-	-
Hexachlorobenzene	118-74-1		0.7	0.8	15			0.07	0.8	mg/kg	0.14	U	-	-
Methoxychlor	72-43-5		200	400	140			20		mg/kg	1.1	U	-	-
MCP Polychlorinated Biphenyls														
Aroclor 1016	12674-11-2		1	4	1.6				4	mg/kg	0.092	U	-	-
Aroclor 1221	11104-28-2		1	4	1.6				4	mg/kg	0.092	U	-	-
Aroclor 1232	11141-16-5		1	4	1.6				4	mg/kg	0.092	U	-	-
Aroclor 1242	53469-21-9		1	4	1.6				4	mg/kg	0.092	U	-	-
Aroclor 1248	12672-29-6		1	4	1.6				4	mg/kg	0.092	U	-	-
Aroclor 1254	11097-69-1		1	4	1.6				4	mg/kg	0.092	U	-	-
Aroclor 1260	11096-82-5		1	4	1.6				4	mg/kg	0.092	U	-	-
Aroclor 1262	37324-23-5		1	4	1.6					mg/kg	0.092	U	-	-
Aroclor 1268	11100-14-4		1	4	1.6					mg/kg	0.092	U	-	-
PCBs, Total	1336-36-3		1	4	1.6	2	2	0.1	4	mg/kg	0.092	U	-	-
MCP Semivolatile Organics														
Biphenyl	92-52-4		0.05	6				0.005			0.77	U	-	-
Acenaphthene	83-32-9	0.5	4	3000	5000			4	69	mg/kg	0.099	J	-	-
Acenaphthylene	208-96-8	0.5	1	10	14			1	10	mg/kg	0.16	J	-	-
Acetophenone	98-86-2		1000	10000				100	2500	mg/kg	0.39	U	-	-
Aniline	62-53-3		1000	10000				100	2500	mg/kg	0.39	U	-	-
Anthracene	120-12-7	1	1000	3000	5000			1000	2500	mg/kg	0.43		-	-
Benzo(a)anthracene	56-55-3	2	7	40	160			7	40	mg/kg	1.2		-	-
Benzo(a)pyrene	50-32-8	2	2	7	16			2	7	mg/kg	1.3		-	-
Benzo(b)fluoranthene	205-99-2	2	7	40	160			7	40	mg/kg	1.5		-	-
Benzo(ghi)perylene	191-24-2	1	1000	3000	5000			1000	2500	mg/kg	0.64		-	-
Benzo(k)fluoranthene	207-08-9	1	70	400	1600			70	400	mg/kg	0.61		-	-
Bis(2-chloroethoxy)methane	111-91-1		500	5000				50	2500	mg/kg	0.39	U	-	-
Bis(2-chloroethyl)ether	111-44-4		0.7	0.7	4.7			0.1	0.7	mg/kg	0.39	U	-	-
Bis(2-chloroisopropyl)ether	108-60-1		0.7	0.7	74			0.1	0.7	mg/kg	0.39	U	-	-
Bis(2-ethylhexyl)phthalate	117-81-7		90	600	230			60	600	mg/kg	0.39	U	-	-
4-Bromophenyl phenyl ether	101-55-3		100	1000				10	500	mg/kg	0.39	U	-	-
Butyl benzyl phthalate	85-68-7		100	1000				10	500	mg/kg	0.39	U	-	-
4-Chloroaniline	106-47-8		1	3	3.3			0.1	3	mg/kg	0.76	U	-	-
2-Chloronaphthalene	91-58-7		1000	10000				100	2500	mg/kg	0.39	U	-	-
2-Chlorophenol	95-57-8		0.7	100	310			0.1	7	mg/kg	0.39	U	-	-
Chrysene	218-01-9	2	70	400	3400			70	400	mg/kg	1.2		-	-
Dibenzo(a,h)anthracene	53-70-3	0.5	0.7	4	16			0.7	4	mg/kg	0.19	J	-	-
Dibenzofuran	132-64-9		100	1000				100	500	mg/kg	0.15	J	-	-
Di-n-butylphthalate	84-74-2		50	500				5	375	mg/kg	0.39	U	-	-
1,2-Dichlorobenzene	95-50-1		9	100	330			0.9	90	mg/kg	0.39	U	-	-
1,3-Dichlorobenzene	541-73-1		3	200	500			0.3	30	mg/kg	0.39	U	-	-
1,4-Dichlorobenzene	106-46-7		0.7	1	1200			0.1	1	mg/kg	0.39	U	-	-
3,3'-Dichlorobenzidine	91-94-1		3	20	20			0.3	20	mg/kg	0.2	U	-	-
2,4-Dichlorophenol	120-83-2		0.7	40	40			0.1	7	mg/kg	0.39	U	-	-
Diethyl phthalate	84-66-2		10	200	290			1	75	mg/kg	0.39	U	-	-
2,4-Dimethylphenol	105-67-9		0.7	100	1300			0.1	7	mg/kg	0.39	U	-	-
Dimethyl phthalate	131-11-3		0.7	50	550			0.1	7	mg/kg	0.39	U	-	-
2,4-Dinitrophenol	51-28-5		3	50	45			0.3	30	mg/kg	0.76	U	-	-
2,4-Dinitrotoluene	121-14-2		0.7	10	36			0.1	7	mg/kg	0.39	U	-	-
2,6-Dinitrotoluene	606-20-2		100	1000				10	500	mg/kg	0.39	U	-	-
Di-n-octylphthalate	117-84-0		1000	10000				100	2500	mg/kg	0.39	U	-	-
Azobenzene	103-33-3		50	500				5	375	mg/kg	0.39	U	-	-
Fluoranthene	206-44-0	4	1000	3000	5000			1000	2500	mg/kg	2.2		-	-
Fluorene	86-73-7	1	1000	3000	5000			1000	2500	mg/kg	0.18	J	-	-

Table 2 - Soil Characterization Analytical Results
MBTA Green Line Extension Project
132 Washington Street
Somerville, Massachusetts
Release Tracking Number 3-34742
March 2022 - August 2022

LOCATION										GLC-WASHPUMPGAS030222-DC-COMP		GLC-WASHPUMPGAS030222-DC-VOC(1)		
SAMPLING DATE										3/11/2022		3/11/2022		
LAB SAMPLE ID										22C1091-01		22C1091-02		
SAMPLE TYPE										SOIL		SOIL		
	CasNum	MA-BLNS	RCS-1-14	RCS-2-14	BUD-S3/G3	MA-LLAND	MA-ULAND	Saugus	TRC-SSSR-GLX	Units	Results	Qual	Results	Qual
Hexachlorobenzene	118-74-1		0.7	0.8	15			0.1	0.8	mg/kg	0.39	U	-	-
Hexachlorobutadiene	87-68-3		30	100	54			3	100	mg/kg	0.39	U	-	-
Hexachloroethane	67-72-1		0.7	3	74			0.1	3	mg/kg	0.39	U	-	-
Indeno(1,2,3-cd)pyrene	193-39-5	1	7	40	160			7	40	mg/kg	0.70		-	-
Isophorone	78-59-1		100	1000				10	500	mg/kg	0.39	U	-	-
2-Methylnaphthalene	91-57-6	0.5	0.7	80	240			0.7	25	mg/kg	0.18	J	-	-
2-Methylphenol	95-48-7		500	5000				50	2500	mg/kg	0.39	U	-	-
3-Methylphenol/4-Methylphenol	108-39-4/106-44-5		500	5000				50	2500	mg/kg	0.39	U	-	-
Naphthalene	91-20-3	0.5	4	20	3000			4	20	mg/kg	0.32		-	-
Nitrobenzene	98-95-3		500	5000				50	2500	mg/kg	0.39	U	-	-
2-Nitrophenol	88-75-5		100	1000				10	500	mg/kg	0.39	U	-	-
4-Nitrophenol	100-02-7		100	1000				10	500	mg/kg	0.76	U	-	-
Pentachlorophenol	87-86-5		3	10	13			0.3	10	mg/kg	0.39	U	-	-
Phenanthrene	85-01-8	3	10	1000	3000			10	532.5	mg/kg	1.2		-	-
Phenol	108-95-2		1	20	16			0.1	10	mg/kg	0.39	U	-	-
Pyrene	129-00-0	4	1000	3000	5000			1000	2500	mg/kg	2.3		-	-
Pyridine	110-86-1		500	5000				50		mg/kg	0.39	U	-	-
1,2,4-Trichlorobenzene	120-82-1		2	6	450			0.2	6	mg/kg	0.39	U	-	-
2,4,5-Trichlorophenol	95-95-4		4	600	580			0.4	40	mg/kg	0.39	U	-	-
2,4,6-Trichlorophenol	88-06-2		0.7	20	19			0.1	7	mg/kg	0.39	U	-	-
Total SVOCs						100	100			mg/kg	14.559	J	-	-
MCP Total Metals														
Antimony, Total	7440-36-0	1	20	30	16			20	30	mg/kg	1.9	U	-	-
Arsenic, Total	7440-38-2	20	20	20	11	40	40	20	20	mg/kg	4.1		-	-
Barium, Total	7440-39-3	50	1000	3000	2100			1000	2500	mg/kg	38		-	-
Beryllium, Total	7440-41-7	0.4	90	200	10			90	200	mg/kg	0.38		-	-
Cadmium, Total	7440-43-9	2	70	100	16	80	30	70	100	mg/kg	0.38	U	-	-
Chromium, Total	7440-47-3	30	100	200	570	1000	1000	100	200	mg/kg	23		-	-
Lead, Total	7439-92-1	100	200	600	110	2000	1000	200	600	mg/kg	32		-	-
Mercury, Total	7439-97-6	0.3	20	30	16	10	10	20	30	mg/kg	0.17		-	-
Nickel, Total	7440-02-0	20	600	1000	350			600	1000	mg/kg	19		-	-
Selenium, Total	7782-49-2	0.5	400	700	390			400	700	mg/kg	3.8	U	-	-
Silver, Total	7440-22-4	0.6	100	200	110			100	200	mg/kg	0.38	U	-	-
Thallium, Total	7440-28-0	0.6	8	60	37			8	60	mg/kg	1.9	U	-	-
Vanadium, Total	7440-62-2	30	400	700	530			400	700	mg/kg	42		-	-
Zinc, Total	7440-66-6	100	1000	3000	5000			1000	2500	mg/kg	65		-	-
MCP Volatile Organics by EPA 5035														
Acetone	67-64-1		6	50	350			0.6	50	mg/kg	-	-	0.074	U
Tertiary-Amyl Methyl Ether	994-05-8							0.01		mg/kg	-	-	0.00074	U
Benzene	71-43-2		2	200	540			0.2	20	mg/kg	-	-	0.0015	U
Bromobenzene	108-86-1		100	1000				10	500	mg/kg	-	-	0.0015	U
Bromochloromethane	74-97-5							0.01		mg/kg	-	-	0.0015	U
Bromodichloromethane	75-27-4		0.1	0.1	460			0.1	0.1	mg/kg	-	-	0.0015	U
Bromoform	75-25-2		0.1	1	800			0.1	1	mg/kg	-	-	0.0015	U
Bromomethane	74-83-9		0.5	0.5	32			0.1	0.5	mg/kg	-	-	0.0074	U
Methyl ethyl ketone	78-93-3		4	50	350			0.4	40	mg/kg	-	-	0.029	U
n-Butylbenzene	104-51-8							0.01	500	mg/kg	-	-	0.0015	U
sec-Butylbenzene	135-98-8							0.01	500	mg/kg	-	-	0.0015	U
tert-Butylbenzene	98-06-6		100	1000				10	500	mg/kg	-	-	0.0015	U
Ethyl-Tert-Butyl-Ether	637-92-3							0.01		mg/kg	-	-	0.00074	U
Carbon disulfide	75-15-0		100	1000				10	500	mg/kg	-	-	0.0074	U
Carbon tetrachloride	56-23-5		5	5	220			0.5	5	mg/kg	-	-	0.0015	U
Chlorobenzene	108-90-7		1	3	110			0.1	3	mg/kg	-	-	0.0015	U
Dibromochloromethane	124-48-1		0.005	0.03	340			0.0005	0.03	mg/kg	-	-	0.00074	U
Chloroethane	75-00-3		100	1000				10	500	mg/kg	-	-	0.015	U
Chloroform	67-66-3		0.2	0.2	410			0.1	0.2	mg/kg	-	-	0.0029	U
Chloromethane	74-87-3		100	1000				10	500	mg/kg	-	-	0.0074	U
o-Chlorotoluene	95-49-8		100	1000				10	500	mg/kg	-	-	0.0015	U
p-Chlorotoluene	106-43-4							0.01	500	mg/kg	-	-	0.0015	U
1,2-Dibromo-3-chloropropane	96-12-8		10	100				1	75	mg/kg	-	-	0.0015	U
1,2-Dibromoethane	106-93-4		0.1	0.1	0.33			0.1	0.1	mg/kg	-	-	0.00074	U
Dibromomethane	74-95-3		500	5000				50	2500	mg/kg	-	-	0.0015	U
1,2-Dichlorobenzene	95-50-1		9	100	330			0.9	90	mg/kg	-	-	0.0015	U
1,3-Dichlorobenzene	541-73-1		3	200	500			0.3	30	mg/kg	-	-	0.0015	U
1,4-Dichlorobenzene	106-46-7		0.7	1	1200			0.1	1	mg/kg	-	-	0.0015	U
Dichlorodifluoromethane	75-71-8		1000	10000				100	2500	mg/kg	-	-	0.015	U
1,1-Dichloroethane	75-34-3		0.4	9	1300			0.1	4	mg/kg	-	-	0.0015	U
1,2-Dichloroethane	107-06-2		0.1	0.1	310			0.1	0.1	mg/kg	-	-	0.0015	U
1,1-Dichloroethene	75-35-4		3	40	1600			0.3	30	mg/kg	-	-	0.0029	U
cis-1,2-Dichloroethene	156-59-2		0.1	0.1	500			0.1	0.1	mg/kg	-	-	0.0015	U
trans-1,2-Dichloroethene	156-60-5		1	1	2500			0.1	1	mg/kg	-	-	0.0015	U
1,2-Dichloropropane	78-87-5		0.1	0.1	280			0.1	0.1	mg/kg	-	-	0.0015	U
1,3-Dichloropropane	142-28-9		500	5000				50	2500	mg/kg	-	-	0.00074	U
2,2-Dichloropropane	594-20-7							0.01	0.1	mg/kg	-	-	0.0015	U
1,1-Dichloropropene	563-58-6							0.01	0.1	mg/kg	-	-	0.0015	U
cis-1,3-Dichloropropene	10061-01-5		0.01	0.4	140			0.001	0.1	mg/kg	-	-	0.00074	U
trans-1,3-Dichloropropene	10061-02-6		0.01	0.4	140			0.001	0.1	mg/kg	-	-	0.00074	U
Diethyl ether	60-29-7		100	1000				10	500	mg/kg	-	-	0.015	U
Diisopropyl Ether	108-20-3		100	1000				10	500	mg/kg	-	-	0.00074	U
1,4-Dioxane	123-91-1		0.2	6	450			0.1	2	mg/kg	-	-	0.074	U
Ethylbenzene	100-41-4		40	1000	230			4	300	mg/kg	-	-	0.0015	U
Hexachlorobutadiene	87-68-3		30	100	54			3	100	mg/kg	-	-	0.0015	U
2-Hexanone	591-78-6		100	1000				10	500	mg/kg	-	-	0.015	U
Isopropylbenzene	98-82-8		1000	10000				100	2500	mg/kg	-	-	0.0015	U
p-Isopropyltoluene	99-87-6		100	1000				10	500	mg/kg	-	-	0.0015	U
Methyl tert butyl ether	1634-04-4		0.1	100	500			0.1	1.9	mg/kg	-	-	0.0029	U
Methylene chloride	75-09-2		0.1	4	900			0.1	1	mg/kg	-	-	0.015	U
Methyl isobutyl ketone	108-10-1		0.4	50	400			0.1	4	mg/kg	-	-	0.015	U
Naphthalene	91-20-3	0.5	4	20	3000			4	20	mg/kg	-	-	0.0029	U

Table 2 - Soil Characterization Analytical Results
MBTA Green Line Extension Project
132 Washington Street
Somerville, Massachusetts
Release Tracking Number 3-34742
March 2022 - August 2022

LOCATION										GLC-WASHPUMPGAS030222-DC-COMP		GLC-WASHPUMPGAS030222-DC-VOC(1)			
SAMPLING DATE										3/11/2022		3/11/2022			
LAB SAMPLE ID										22C1091-01		22C1091-02			
SAMPLE TYPE										SOIL		SOIL			
		CasNum	MA-BLNS	RCS-1-14	RCS-2-14	BUD-S3/G3	MA-LLAND	MA-ULAND	Saugus	TRC-SSSR-GLX	Units	Results	Qual	Results	Qual
	n-Propylbenzene	103-65-1		100	1000				10	500	mg/kg	-	-	0.0015	U
	Styrene	100-42-5		3	4	630			0.3	4	mg/kg	-	-	0.0015	U
	1,1,1,2-Tetrachloroethane	630-20-6		0.1	0.1	150			0.1	0.1	mg/kg	-	-	0.0015	U
	1,1,2,2-Tetrachloroethane	79-34-5		0.005	0.02	19			0.0005	0.02	mg/kg	-	-	0.00074	U
	Tetrachloroethene	127-18-4		1	10	370			0.1	10	mg/kg	-	-	0.0085	
	Tetrahydrofuran	109-99-9		500	5000				50	2500	mg/kg	-	-	0.0074	U
	Toluene	108-88-3		30	1000	520			3	225	mg/kg	-	-	0.0015	U
	1,2,3-Trichlorobenzene	87-61-6							0.01		mg/kg	-	-	0.0015	U
	1,2,4-Trichlorobenzene	120-82-1		2	6	450			0.2	6	mg/kg	-	-	0.0015	U
	1,1,1-Trichloroethane	71-55-6		30	600	1400			3	225	mg/kg	-	-	0.0015	U
	1,1,2-Trichloroethane	79-00-5		0.1	2	91			0.1	1	mg/kg	-	-	0.0015	U
	Trichloroethene	79-01-6		0.3	0.3	810			0.1	0.3	mg/kg	-	-	0.0015	U
	Trichlorofluoromethane	75-69-4		1000	10000				100	2500	mg/kg	-	-	0.0074	U
	1,2,3-Trichloropropane	96-18-4		100	1000				10	500	mg/kg	-	-	0.0015	U
	1,2,4-Trimethylbenzene	95-63-6		1000	10000				100	2500	mg/kg	-	-	0.0015	U
	1,3,5-Trimethylbenzene	108-67-8		10	100				1	75	mg/kg	-	-	0.0015	U
	Vinyl chloride	75-01-4		0.7	0.7	12			0.1	0.7	mg/kg	-	-	0.0074	U
	p/m-Xylene	179601-23-1		100	100	270			10	100	mg/kg	-	-	0.0029	U
	o-Xylene	95-47-6		100	100	270			10	100	mg/kg	-	-	0.0015	U
	Total VOCs						10	4			mg/kg	-	-	0.0085	
Petroleum Hydrocarbon Quantitation															
	TPH (C9-C36)	TPHC9-C36		1000	3000	500	5000	2500	500	2500	mg/kg	760		-	-

Yellow shading indicates detected result is equal to or above one or more of the listed criteria, except for MA Background Level Natural soil.

Gray shading indicates nondetect detection limit is above one or more of the listed criteria, except for MA Background Level Natural soil.

RCS-1-14: MCP 2014 RCS-1 Reportable Concentrations Criteria effective April 25, 2014.

RCS-2-14: MCP 2014 RCS-2 Reportable Concentrations Criteria effective April 25, 2014.

BUD-S3/G3: MassDEP Proposed S3, GW-3 Beneficial Use Determination (BUD) Values Criteria per Draft Interim Guidance Document effective March 18, 2004.

MA-BLNS: Background Level Natural soil current as of 10/24/07

MA-LLAND: Lined Landfill Limits current as of August, 1997

MA-ULAND: UnLined Landfill Limits current as of August, 1997

TRC-SSSR-GLX: Site Specific Soil Reuse Criteria: Vehicle Maintenance Facility for GLX Project Criteria per client-provided Table X February 21, 2018.

Saugus: Acceptance Criteria for Aggregate Industries - Saugus Quarry, Table 1.

U - Not detected at the reported detection limit for the sample.

J - Estimated value.

Table 2 - 2022 Analytical Results
MBTA Green Line Extension Project
Somerville, Massachusetts
July 27, 2022

LOCATION										GLC-WASHPUMPGRADING-062322-DC-VOC(7)	GLC-WASHPUMPGRADING-062322-DC-COMP
SAMPLING DATE										7/27/2022	7/27/2022
LAB SAMPLE ID										1.2240165-01	1.2240165-02
SAMPLE TYPE										SOIL	SOIL
REUSE/DISPOSAL FACILITY										MA Unlined Landfill	MA Unlined Landfill
Units										Results	Qual
Results										Results	Qual
General Chemistry	CasNum	MA-BLNS	RCS-1-14	RCS-2-14	BUD-S3/G3	MA-LLAND	MA-ULAND	Saugus	Dudley <RCS-2	TRC-SSSR-GLX	
Specific Conductance @ 25 C	NONE					8000	4000	2000	2000	umhos/cm	-
Solids, Total	NONE									%	98.1
pH (H)	12408-02-5							5-9	5-9	SU	-
Cyanide, Reactive	57-12-5							250	250	mg/kg	-
Sulfide, Reactive	NONE							500	500	mg/kg	-
Ignitability of Solids											-
Ignitability	NONE							>140*	Not Ignitable (NI)	NI	-
MCP Chlorinated Herbicides											-
MCP	93-65-2							3.3		mg/kg	-
MCPA	94-74-6							10	100	mg/kg	-
Dalapon	75-99-0		1000	10000				100	1000	mg/kg	-
Dicamba	1918-00-9		500	5000				50	500	mg/kg	-
Dichloroprop	120-36-5							0.08		mg/kg	-
2,4-D	94-75-7		100	1000				10	100	mg/kg	-
2,4-DB	94-82-6		100	1000				10	100	mg/kg	-
2,4,5-T	93-76-5		100	1000				10	100	mg/kg	-
2,4,5-TP (Silvex)	93-72-1		100	1000				10	100	mg/kg	-
MCP Organochlorine Pesticides											-
Delta-BHC	319-86-8		10	100				1	10	mg/kg	-
Lindane	58-89-9		0.003	0.5	0.46			0.0003	0.05	mg/kg	-
Alpha-BHC	319-84-6		50	500				5	50	mg/kg	-
Beta-BHC	319-85-7		10	100				1	10	mg/kg	-
Heptachlor	76-44-8		0.3	2	4.2			0.05	0.2	mg/kg	-
Aldrin	309-00-2		0.08	0.5	0.7			0.05	0.05	mg/kg	-
Heptachlor epoxide	1024-57-3		0.1	0.9	0.35			0.05	0.09	mg/kg	-
Endrin	72-20-8		10	20	7			1	2	mg/kg	-
Endrin ketone	53494-70-5							0.008		mg/kg	-
Dieldrin	60-57-1		0.08	0.5	1			0.05	0.05	mg/kg	-
4,4'-DDE	72-55-9		6	30	14			0.6	3	mg/kg	-
4,4'-DDD	72-54-8		8	40	14			0.8	4	mg/kg	-
4,4'-DDT	50-29-3		6	30	14			0.6	3	mg/kg	-
Endosulfan I	959-98-8		0.5	1	1.2			0.05	0.1	mg/kg	-
Endosulfan II	33213-65-9		0.5	1	1.2			0.05	0.1	mg/kg	-
Endosulfan sulfate	1031-07-8							0.008		mg/kg	-
Methoxychlor	72-43-5		200	400	140			20	40	mg/kg	-
Chlordane	57-74-9		0.7	30	27			0.07	3	mg/kg	-
Hexachlorobenzene	118-74-1		0.7	0.8	15			0.07	0.08	mg/kg	-
MCP Polychlorinated Biphenyls											-
Aroclor 1016	12674-11-2		1	4	1.6				4	mg/kg	-
Aroclor 1221	11104-28-2		1	4	1.6				4	mg/kg	-
Aroclor 1232	11141-16-5		1	4	1.6				4	mg/kg	-
Aroclor 1242	53469-21-9		1	4	1.6				4	mg/kg	-
Aroclor 1248	12672-29-6		1	4	1.6				4	mg/kg	-
Aroclor 1254	11097-69-1		1	4	1.6				4	mg/kg	-
Aroclor 1260	11096-82-5		1	4	1.6				4	mg/kg	-
Aroclor 1262	37324-23-5		1	4	1.6				4	mg/kg	-
Aroclor 1268	11100-14-4		1	4	1.6				4	mg/kg	-
PCBs, Total	1336-36-3		1	4	1.6	2	2	0.1	0.1	4	mg/kg
MCP Semivolatile Organics											-
Acenaphthene	83-32-9	0.5	4	3000	5000			4	5	69	mg/kg
1,2,4-Trichlorobenzene	120-82-1		2	6	450			0.2	0.6	6	mg/kg
Hexachlorobenzene	118-74-1		0.7	0.8	15			0.1	0.08	0.8	mg/kg
Bis(2-chloroethyl)ether	111-44-4		0.7	0.7	4.7			0.1	0.07	0.7	mg/kg
2-Chloronaphthalene	91-58-7		1000	10000				100	100	2500	mg/kg
1,2-Dichlorobenzene	95-50-1		9	100	330			0.9	10	90	mg/kg
1,3-Dichlorobenzene	541-73-1		3	200	500			0.3	20	30	mg/kg
1,4-Dichlorobenzene	106-46-7		0.7	1	1200			0.1	0.1	1	mg/kg
3,3'-Dichlorobenzidine	91-94-1		3	20	20			0.3	2	20	mg/kg
2,4-Dinitrotoluene	121-14-2		0.7	10	36			0.1	1	7	mg/kg
2,6-Dinitrotoluene	606-20-2		100	1000				10	100	500	mg/kg
Azobenzene	103-33-3		50	500				5	50	375	mg/kg
Fluoranthene	206-44-0	4	1000	3000	5000			1000	40	2500	mg/kg
4-Bromophenyl phenyl ether	101-55-3		100	1000				10	100	500	mg/kg
Bis(2-chloroisopropyl)ether	108-60-1		0.7	0.7	74			0.1	0.07	0.7	mg/kg
Bis(2-chloroethoxy)methane	111-91-1		500	5000				50	100	2500	mg/kg
Hexachlorobutadiene	87-68-3		30	100	54			3	10	100	mg/kg
Hexachloroethane	67-72-1		0.7	3	74			0.1	0.3	3	mg/kg
Isophorone	78-59-1		100	1000				10	100	500	mg/kg
Naphthalene	91-20-3	0.5	4	20	3000			4	5	20	mg/kg
Nitrobenzene	98-95-3		500	5000				50	100	2500	mg/kg
Bis(2-ethylhexyl)phthalate	117-81-7		90	600	230			60	60	600	mg/kg
Butyl benzyl phthalate	85-68-7		100	1000				10	100	500	mg/kg
Di-n-butylphthalate	84-74-2		50	500				5	50	375	mg/kg
Di-n-octylphthalate	117-84-0		1000	10000				100	100	2500	mg/kg

Table 2 - 2022 Analytical Results
MBTA Green Line Extension Project
Somerville, Massachusetts
July 27, 2022

LOCATION										GLC-WASHPUMPGRADING-062322-DC-VOC(7)	GLC-WASHPUMPGRADING-062322-DC-COMP
SAMPLING DATE										7/27/2022	7/27/2022
LAB SAMPLE ID										1.2240165-01	1.2240165-02
SAMPLE TYPE										SOIL	SOIL
REUSE/ DISPOSAL FACILITY										MA Unlined Landfill	
										Results	Qual
										Results	Qual
CasNum	MA-BLNS	RCS-1-14	RCS-2-14	BUD-S3/G3	MA-LLAND	MA-ULAND	Saugus	Dudley <RCS-2	TRC-SSSR-GLX	Units	
Diethyl phthalate	84-68-2	10	20	290			1	20	75	mg/kg	0.17
Dimethyl phthalate	131-11-3	0.7	50	550			0.1	5	7	mg/kg	0.071
Benzo(a)anthracene	56-55-3	2	7	40	160		7	20	40	mg/kg	3.7
Benzo(a)pyrene	50-32-8	2	2	7	16		2	7	7	mg/kg	4.6
Benzo(b)fluoranthene	205-99-2	2	7	40	160		7	20	40	mg/kg	4.8
Benzo(k)fluoranthene	207-08-9	1	70	400	1600		70	10	400	mg/kg	1.6
Chrysene	218-01-9	2	70	400	3400		70	20	400	mg/kg	3.7
Acenaphthylene	208-96-8	0.5	1	10	14		1	5	10	mg/kg	1.4
Anthracene	120-12-7	1	1000	3000	5000		1000	10	2500	mg/kg	2.2
Benzo(ghi)perylene	191-24-2	1	1000	3000	5000		1000	10	2500	mg/kg	2.7
Fluorene	86-73-7	1	1000	3000	5000		1000	10	2500	mg/kg	0.76
Phenanthrene	85-01-8	3	10	1000	3000		10	30	532.5	mg/kg	4.4
Dibenzo(a,h)anthracene	53-70-3	0.5	0.7	4	16		0.7	4	4	mg/kg	0.6
Indeno(1,2,3-cd)pyrene	193-39-5	1	7	40	160		7	10	40	mg/kg	3.1
Pyrene	129-00-0	4	1000	3000	5000		1000	40	2500	mg/kg	5.9
Aniline	62-53-3		1000	10000			100	100	2500	mg/kg	0.2
4-Chloroaniline	106-47-8		1	3	3.3		0.1	0.3	3	mg/kg	0.17
Dibenzofuran	132-64-9		100	1000			100	100	500	mg/kg	0.47
2-Methylnaphthalene	91-57-6	0.5	0.7	80	240		0.7	5	25	mg/kg	0.78
Acetophenone	98-86-2		1000	10000			100	100	2500	mg/kg	0.17
2,4,6-Trichlorophenol	88-06-2		0.7	20	19		0.1	2	7	mg/kg	0.071
2-Chlorophenol	95-57-8		0.7	100	310		0.1	100	7	mg/kg	0.071
2,4-Dichlorophenol	120-83-2		0.7	40	40		0.1	4	7	mg/kg	0.071
2,4-Dimethylphenol	105-67-9		0.7	100	1300		0.1	10	7	mg/kg	0.071
2-Nitrophenol	88-75-5		100	1000			10	100	500	mg/kg	0.36
4-Nitrophenol	100-02-7		100	1000			10	100	500	mg/kg	0.24
2,4-Dinitrophenol	51-28-5		3	50	45		0.3	5	30	mg/kg	0.81
Pentachlorophenol	87-86-5		3	10	13		0.3	1	10	mg/kg	0.34
Phenol	108-95-2		1	20	16		0.1	2	10	mg/kg	0.17
2-Methylphenol	95-48-7		500	5000			50	100	2500	mg/kg	0.17
3-Methylphenol/4-Methylphenol	108-39-4/106-44-5		500	5000			50	100	2500	mg/kg	0.24
2,4,5-Trichlorophenol	95-95-4		4	600	580		0.4	60	40	mg/kg	0.17
Pyridine	110-86-1		500	5000			50	100		mg/kg	0.18
Biphenyl	92-52-4	0.05	6				0.005	0.6		mg/kg	0.14
Total SVOCs					100	100				mg/kg	48.7
MCP Total Metals											
Antimony, Total	7440-36-0	1	20	30	16		20	10	30	mg/kg	2.04
Arsenic, Total	7440-38-2	20	20	20	11	40	40	20	20	mg/kg	3.46
Barium, Total	7440-39-3	50	1000	3000	2100		1000	375	2500	mg/kg	22.9
Beryllium, Total	7440-41-7	0.4	90	200	10		90	4	200	mg/kg	0.204
Cadmium, Total	7440-43-9	2	70	100	16	80	30	70	100	mg/kg	0.409
Chromium, Total	7440-47-3	30	100	200	570	1000	1000	100	200	mg/kg	9.94
Lead, Total	7439-92-1	100	200	600	110	2000	1000	200	500	mg/kg	43.2
Mercury, Total	7439-97-6	0.3	20	30	16	10	10	20	3	mg/kg	0.139
Nickel, Total	7440-02-0	20	600	1000	350		600	150	1000	mg/kg	8
Selenium, Total	7782-49-2	0.5	400	700	390		400	5	700	mg/kg	2.04
Silver, Total	7440-22-4	0.6	100	200	110		100	6	200	mg/kg	0.409
Thallium, Total	7440-28-0	0.6	8	60	37		8	6	60	mg/kg	2.04
Vanadium, Total	7440-62-2	30	400	700	530		400	225	700	mg/kg	18.9
Zinc, Total	7440-66-6	100	1000	3000	5000		1000	500	2500	mg/kg	53.4
MCP Volatile Organics by EPA 5035											
Methylene chloride	75-09-2		0.1	4	900		0.1	0.01	1	mg/kg	0.0052
1,1-Dichloroethane	75-34-3		0.4	9	1300		0.1	0.04	4	mg/kg	0.001
Chloroform	67-66-3		0.2	0.2	410		0.1	0.02	0.2	mg/kg	0.0016
Carbon tetrachloride	56-23-5		5	5	220		0.5	0.5	5	mg/kg	0.001
1,2-Dichloropropane	78-87-5		0.1	0.1	280		0.1	0.01	0.1	mg/kg	0.001
Dibromochloromethane	124-48-1		0.005	0.03	340		0.0005	0.0005	0.03	mg/kg	0.001
1,1,2-Trichloroethane	79-00-5		0.1	2	91		0.1	0.01	1	mg/kg	0.001
Tetrachloroethane	127-18-4		1	10	370		0.1	0.1	10	mg/kg	0.00058
Chlorobenzene	108-90-7		1	3	110		0.1	0.1	3	mg/kg	0.00052
Trichlorofluoromethane	75-69-4		1000	10000			100	100	2500	mg/kg	0.0042
1,2-Dichloroethane	107-06-2		0.1	0.1	310		0.1	0.01	0.1	mg/kg	0.001
1,1,1-Trichloroethane	71-55-6		30	800	1400		3	3	225	mg/kg	0.0052
Bromodichloromethane	75-27-4		0.1	0.1	460		0.1	0.01	0.1	mg/kg	0.00052
trans-1,3-Dichloropropene	10061-02-6		0.01	0.4	140		0.001	0.001	0.1	mg/kg	0.001
cis-1,3-Dichloropropene	10061-01-5		0.01	0.4	140		0.001	0.001	0.1	mg/kg	0.00052
1,3-Dichloropropene, Total	542-75-6		0.01	0.4	140		0.001	0.001	0.1	mg/kg	0.00052
1,1-Dichloropropene	563-58-6						0.01	0.001	0.1	mg/kg	0.00052
Bromoform	75-25-2		0.1	1	800		0.1	0.01	1	mg/kg	0.0042
1,1,2,2-Tetrachloroethane	79-34-5		0.005	0.02	19		0.0005	0.0005	0.02	mg/kg	0.00052
Benzene	71-43-2		2	200	540		0.2	0.2	20	mg/kg	0.00052
Toluene	108-88-3		30	1000	520		3	3	225	mg/kg	0.001
Ethylbenzene	100-41-4		40	1000	230		4	4	300	mg/kg	0.001
Chloromethane	74-87-3		100	1000			10	10	500	mg/kg	0.0042
Bromomethane	74-83-9		0.5	0.5	32		0.1	0.05	0.5	mg/kg	0.0021
Vinyl chloride	75-01-4		0.7	0.7	12		0.1	0.07	0.7	mg/kg	0.001
Chloroethane	75-00-3		100	1000			10	10	500	mg/kg	0.0021
1,1-Dichloroethene	75-35-4		3	40	1600		0.3	0.3	30	mg/kg	0.001

Table 2 - 2022 Analytical Results
MBTA Green Line Extension Project
Somerville, Massachusetts
July 27, 2022

LOCATION										GLC-WASHPUMPGRADING-062322-DC-VOC(7)		GLC-WASHPUMPGRADING-062322-DC-COMP			
SAMPLING DATE										7/27/2022		7/27/2022			
LAB SAMPLE ID										1.2240165-01		1.2240165-02			
SAMPLE TYPE										SOIL		SOIL			
REUSE/DISPOSAL FACILITY										MA Unlined Landfill		MA Unlined Landfill			
	CasNum	MA-BLNS	RCS-1-14	RCS-2-14	BUD-S3/G3	MA-LLAND	MA-ULAND	Saugus	Dudley <RCS-2	TRC-SSSR-GLX	Units	Results	Qual	Results	Qual
trans-1,2-Dichloroethene	156-60-5		1	1	2500			0.1	0.1	1	mg/kg	0.0016	U	-	-
Trichloroethene	79-01-6		0.3	0.3	810			0.1	0.03	0.3	mg/kg	0.00052	U	-	-
1,2-Dichlorobenzene	95-50-1		9	100	330			0.9	0.9	90	mg/kg	0.0021	U	-	-
1,3-Dichlorobenzene	541-73-1		3	200	500			0.3	0.3	30	mg/kg	0.0021	U	-	-
1,4-Dichlorobenzene	106-46-7		0.7	1	1200			0.1	0.07	1	mg/kg	0.0021	U	-	-
Methyl tert butyl ether	1634-04-4		0.1	100	500			0.1	0.01	1.9	mg/kg	0.0021	U	-	-
p/m-Xylene	179601-23-1		100	100	270			10	10	100	mg/kg	0.0021	U	-	-
o-Xylene	95-47-6		100	100	270			10	10	100	mg/kg	0.001	U	-	-
Xylenes, Total	1330-20-7		100	100	270			10	10	100	mg/kg	0.001	U	-	-
cis-1,2-Dichloroethene	156-59-2		0.1	0.1	500			0.1	0.01	0.1	mg/kg	0.001	U	-	-
1,2-Dichloroethene, Total	540-59-0		0.3					0.1		0.4	mg/kg	0.001	U	-	-
Dibromomethane	74-95-3		500	5000				50	50	2500	mg/kg	0.0021	U	-	-
1,2,3-Trichloropropane	96-18-4		100	1000				10	10	500	mg/kg	0.0021	U	-	-
Styrene	100-42-5		3	4	630			0.3	0.3	4	mg/kg	0.001	U	-	-
Dichlorodifluoromethane	75-71-8		1000	10000				100	100	2500	mg/kg	0.01	U	-	-
Acetone	67-64-1		6	50	350			0.6	0.6	50	mg/kg	0.049	U	-	-
Carbon disulfide	75-15-0		100	1000				10	10	500	mg/kg	0.01	U	-	-
Methyl ethyl ketone	78-93-3		4	50	350			0.4	0.4	40	mg/kg	0.01	U	-	-
Methyl isobutyl ketone	108-10-1		0.4	50	400			0.1	0.04	4	mg/kg	0.01	U	-	-
2-Hexanone	591-78-6		100	1000				10	10	500	mg/kg	0.01	U	-	-
Bromochloromethane	74-97-5							0.01			mg/kg	0.0021	U	-	-
Tetrahydrofuran	109-99-9		500	5000				50	50	2500	mg/kg	0.0042	U	-	-
2,2-Dichloropropane	594-20-7							0.01	0.01	0.1	mg/kg	0.0021	U	-	-
1,2-Dibromoethane	106-93-4		0.1	0.1	0.33			0.1	0.01	0.1	mg/kg	0.001	U	-	-
1,3-Dichloropropane	142-28-9		500	5000				50	50	2500	mg/kg	0.0021	U	-	-
1,1,1,2-Tetrachloroethane	630-20-6		0.1	0.1	150			0.1	0.01	0.1	mg/kg	0.00052	U	-	-
Bromobenzene	108-86-1		100	1000				10	10	500	mg/kg	0.0021	U	-	-
n-Butylbenzene	104-51-8							0.01		500	mg/kg	0.001	U	-	-
sec-Butylbenzene	135-98-8							0.01		500	mg/kg	0.001	U	-	-
tert-Butylbenzene	98-06-6		100	1000				10	10	500	mg/kg	0.0021	U	-	-
o-Chlorotoluene	95-49-8		100	1000				10	10	500	mg/kg	0.0021	U	-	-
p-Chlorotoluene	106-43-4							0.01	1	500	mg/kg	0.0021	U	-	-
1,2-Dibromo-3-chloropropane	96-12-8		10	100				1	1	75	mg/kg	0.0031	U	-	-
Hexachlorobutadiene	87-68-3		30	100	54			3	3	100	mg/kg	0.0042	U	-	-
Isopropylbenzene	98-82-8		1000	10000				100	100	2500	mg/kg	0.001	U	-	-
p-Isopropyltoluene	99-87-6		100	1000				10	10	500	mg/kg	0.001	U	-	-
Naphthalene	91-20-3	0.5	4	20	3000			4	0.4	20	mg/kg	0.0042	U	-	-
n-Propylbenzene	103-65-1		100	1000				10	10	500	mg/kg	0.001	U	-	-
1,2,3-Trichlorobenzene	87-61-6							0.01			mg/kg	0.0021	U	-	-
1,2,4-Trichlorobenzene	120-82-1		2	6	450			0.2	0.2	6	mg/kg	0.0021	U	-	-
1,3,5-Trimethylbenzene	108-67-8		10	100				1	1	75	mg/kg	0.0021	U	-	-
1,2,4-Trimethylbenzene	95-63-6		1000	10000				100	100	2500	mg/kg	0.0021	U	-	-
Diethyl ether	60-29-7		100	1000				10	10	500	mg/kg	0.0021	U	-	-
Diisopropyl Ether	108-20-3		100	1000				10	10	500	mg/kg	0.0021	U	-	-
Ethyl-Tert-Butyl-Ether	637-92-3							0.01			mg/kg	0.0021	U	-	-
Tertiary-Amyl Methyl Ether	994-05-8							0.01			mg/kg	0.0021	U	-	-
1,4-Dioxane	123-91-1		0.2	6	450			0.1	0.02	2	mg/kg	0.083	U	-	-
Total VOCs						10	4				mg/kg	0.04958		-	-
Petroleum Hydrocarbon Quantitation															
TPH (C10-C36)	NONE		1000	3000	500	5000	2500	500	1000	2500	mg/kg	-	-	980	

Yellow shading indicates detected result is equal to or above one or more of the listed criteria, except for MA Background Level Natural soil.

Gray shading indicates nondetect detection limit is above one or more of the listed criteria, except for MA Background Level Natural soil.

RCS-1-14: MCP 2014 RCS-1 Reportable Concentrations Criteria effective April 25, 2014.
RCS-2-14: MCP 2014 RCS-2 Reportable Concentrations Criteria effective April 25, 2014.
BUD-S3/G3: MassDEP Proposed S3, GW-3 Beneficial Use Determination (BUD) Values Criteria per Draft Interim Guidance Document effective March 18, 2004.
MA-BLNS: Background Level Natural soil current as of 10/24/07
MA-LLAND: Lined Landfill Limits current as of August, 1997
MA-ULAND: UnLined Landfill Limits current as of August, 1997
TRC-SSSR-GLX: Site Specific Soil Reuse Criteria: Vehicle Maintenance Facility for GLX Project Criteria per client-provided Table X February 21, 2018.
MA-Dudley <RCS-2 Acceptance Criteria, Revised January 15, 2020.
Saugus: Acceptance Criteria for Aggregate Industries - Saugus Quarry, Table 1.

U - Not detected at the reported detection limit for the sample.

Table 2 - Summary of Soil Sample Analytical Results
MBTA Green Line Extension Project
Somerville, Massachusetts
November 3, 2022

LOCATION											GLC-WASHSTLANDSCAPE-COMP		GLC-WASHSTLANDSCAPE-VOC(3)		
SAMPLING DATE											11/3/2022		11/3/2022		
LAB SAMPLE ID											L2261771-01		L2261771-02		
SAMPLE TYPE											SOIL		SOIL		
	CasNum	MA-BLNS	RCS-1-14	RCS-2-14	BUD-S3/G3	MA-LLAND	MA-ULAND	Saugus	Dudley <RCS-2	TRC-SSSR-GLX	Units	Results	Qual	Results	Qual
General Chemistry															
Specific Conductance @ 25 C		NONE				8000	4000	2000	2000		umhos/cm	120		-	-
Solids, Total		NONE									%	92.3		77.6	
pH (H)		12408-02-5						5-9	5-9	2-12.5	SU	8.3		-	-
Cyanide, Reactive		57-12-5						250	250	250	mg/kg	10	U	-	-
Sulfide, Reactive		NONE						500	500	500	mg/kg	10	U	-	-
Ignitability of Solids															
Ignitability		NONE						>140°	Not Ignitable (NI)	NI		NI		-	-
MCP Chlorinated Herbicides															
MCP		93-65-2						3.3			mg/kg	3.5	U	-	-
MCPA		94-74-6		100	1000			10	100		mg/kg	3.5	U	-	-
Dalapon		75-99-0		1000	10000			100	1000		mg/kg	0.035	U	-	-
Dicamba		1918-00-9		500	5000			50	500		mg/kg	0.035	U	-	-
Dichloroprop		120-36-5						0.08			mg/kg	0.035	U	-	-
2,4-D		94-75-7		100	1000			10	100		mg/kg	0.035	U	-	-
2,4-DB		94-82-6		100	1000			10	100		mg/kg	0.035	U	-	-
2,4,5-T		93-76-5		100	1000			10	100		mg/kg	0.035	U	-	-
2,4,5-TP (Silvex)		93-72-1		100	1000			10	100		mg/kg	0.035	U	-	-
MCP Organochlorine Pesticides															
Delta-BHC		319-86-8		10	100			1	10		mg/kg	0.00167	U	-	-
Lindane		58-89-9		0.003	0.5	0.46		0.0003	0.05		mg/kg	0.000557	U	-	-
Alpha-BHC		319-84-6		50	500			5	50		mg/kg	0.000697	U	-	-
Beta-BHC		319-85-7		10	100			1	10		mg/kg	0.00167	U	-	-
Heptachlor		76-44-8		0.3	2	4.2		0.05	0.2		mg/kg	0.000836	U	-	-
Aldrin		309-00-2		0.08	0.5	0.7		0.05	0.05		mg/kg	0.00167	U	-	-
Heptachlor epoxide		1024-57-3		0.1	0.9	0.35		0.05	0.09		mg/kg	0.00314	U	-	-
Endrin		72-20-8		10	20	7		1	2		mg/kg	0.000697	U	-	-
Endrin ketone		53494-70-5						0.008			mg/kg	0.00167	U	-	-
Dieldrin		60-57-1		0.08	0.5	1		0.05	0.05		mg/kg	0.00104	U	-	-
4,4'-DDE		72-55-9		6	30	14		0.6	3		mg/kg	0.00167	U	-	-
4,4'-DDD		72-54-8		8	40	14		0.8	4		mg/kg	0.00167	U	-	-
4,4'-DDT		50-29-3		6	30	14		0.6	3		mg/kg	0.00314	U	-	-
Endosulfan I		959-98-8		0.5	1	1.2		0.05	0.1		mg/kg	0.00167	U	-	-
Endosulfan II		33213-65-9		0.5	1	1.2		0.05	0.1		mg/kg	0.00167	U	-	-
Endosulfan sulfate		1031-07-8						0.008			mg/kg	0.000697	U	-	-
Methoxychlor		72-43-5		200	400	140		20	40		mg/kg	0.00314	U	-	-
Chlordane		57-74-9		0.7	30	27		0.07	3		mg/kg	0.0139	U	-	-
Hexachlorobenzene		118-74-1		0.7	0.8	15		0.07	0.08	0.8	mg/kg	0.00167	U	-	-
MCP Polychlorinated Biphenyls															
Aroclor 1016		12674-11-2		1	4	1.6				4	mg/kg	0.0345	U	-	-
Aroclor 1221		11104-28-2		1	4	1.6				4	mg/kg	0.0345	U	-	-
Aroclor 1232		11141-16-5		1	4	1.6				4	mg/kg	0.0345	U	-	-
Aroclor 1242		53469-21-9		1	4	1.6				4	mg/kg	0.0345	U	-	-
Aroclor 1248		12672-29-6		1	4	1.6				4	mg/kg	0.0345	U	-	-
Aroclor 1254		11097-69-1		1	4	1.6				4	mg/kg	0.0345	U	-	-
Aroclor 1260		11096-82-5		1	4	1.6				4	mg/kg	0.0345	U	-	-
Aroclor 1262		37324-23-5		1	4	1.6					mg/kg	0.0345	U	-	-
Aroclor 1268		11100-14-4		1	4	1.6					mg/kg	0.0345	U	-	-
PCBs, Total		1336-36-3		1	4	1.6	2	2	0.1	4	mg/kg	0.0345	U	-	-
MCP Semivolatile Organics															
Acenaphthene		83-32-9	0.5	4	3000	5000		4	5	69	mg/kg	0.14	U	-	-
1,2,4-Trichlorobenzene		120-82-1		2	6	450		0.2	0.6	6	mg/kg	0.18	U	-	-
Hexachlorobenzene		118-74-1		0.7	0.8	15		0.1	0.08	0.8	mg/kg	0.074	U	-	-
Bis(2-chloroethyl)ether		111-44-4		0.7	0.7	4.7		0.1	0.07	0.7	mg/kg	0.074	U	-	-
2-Chloronaphthalene		91-58-7		1000	10000			100	100	2500	mg/kg	0.18	U	-	-
1,2-Dichlorobenzene		95-50-1		9	100	330		0.9	10	90	mg/kg	0.18	U	-	-
1,3-Dichlorobenzene		541-73-1		3	200	500		0.3	20	30	mg/kg	0.18	U	-	-
1,4-Dichlorobenzene		106-46-7		0.7	1	1200		0.1	0.1	1	mg/kg	0.074	U	-	-
3,3'-Dichlorobenzidine		91-94-1		3	20	20		0.3	2	20	mg/kg	0.18	U	-	-
2,4-Dinitrotoluene		121-14-2		0.7	10	36		0.1	1	7	mg/kg	0.074	U	-	-
2,6-Dinitrotoluene		606-20-2		100	1000			10	100	500	mg/kg	0.18	U	-	-
Azobenzene		103-33-3						0.67	50	375	mg/kg	0.18	U	-	-
Fluoranthene		206-44-0	4	1000	3000	5000		1000	40	2500	mg/kg	0.59		-	-
4-Bromophenyl phenyl ether		101-55-3		100	1000			10	100	500	mg/kg	0.18	U	-	-
Bis(2-chloroisopropyl)ether		108-60-1		0.7	0.7	74		0.1	0.07	0.7	mg/kg	0.074	U	-	-
Bis(2-chloroethoxy)methane		111-91-1		500	5000			50	100	2500	mg/kg	0.19	U	-	-
Hexachlorobutadiene		87-68-3		30	100	54		3	10	100	mg/kg	0.18	U	-	-
Hexachloroethane		67-72-1		0.7	3	74		0.1	0.3	3	mg/kg	0.074	U	-	-
Isophorone		78-59-1		100	1000			10	100	500	mg/kg	0.16	U	-	-
Naphthalene		91-20-3	0.5	4	20	3000		4	5	20	mg/kg	0.18	U	-	-
Nitrobenzene		98-95-3		500	5000			50	100	2500	mg/kg	0.16	U	-	-
Bis(2-ethylhexyl)phthalate		117-81-7		90	600	230		60	60	600	mg/kg	0.18	U	-	-
Butyl benzyl phthalate		85-68-7		100	1000			10	100	500	mg/kg	0.18	U	-	-
Di-n-butylphthalate		84-74-2		50	500			5	50	375	mg/kg	0.18	U	-	-
Di-n-octylphthalate		117-84-0		1000	10000			100	100	2500	mg/kg	0.18	U	-	-
Diethyl phthalate		84-66-2		10	200	290		1	20	75	mg/kg	0.18	U	-	-
Dimethyl phthalate		131-11-3		0.7	50	550		0.1	5	7	mg/kg	0.074	U	-	-

Table 2 - Summary of Soil Sample Analytical Results
MBTA Green Line Extension Project
Somerville, Massachusetts
November 3, 2022

LOCATION												GLC-WASHSTLANDSCAPE-COMP		GLC-WASHSTLANDSCAPE-VOC(3)		
SAMPLING DATE												11/3/2022		11/3/2022		
LAB SAMPLE ID												L2261771-01		L2261771-02		
SAMPLE TYPE												SOIL		SOIL		
	CasNum	MA-BLNS	RCS-1-14	RCS-2-14	BUD-S3/G3	MA-LLAND	MA-ULAND	Saugus	Dudley <RCS-2	TRC-SSSR-GLX	Units	Results	Qual	Results	Qual	
	Benzo(a)anthracene	56-55-3	2	7	40	160		7	20	40	mg/kg	0.33		-	-	
	Benzo(a)pyrene	50-32-8	2	2	7	16		2	7	7	mg/kg	0.47		-	-	
	Benzo(b)fluoranthene	205-99-2	2	7	40	160		7	20	40	mg/kg	0.49		-	-	
	Benzo(k)fluoranthene	207-08-9	1	70	400	1600		70	10	400	mg/kg	0.18		-	-	
	Chrysene	218-01-9	2	70	400	3400		70	20	400	mg/kg	0.35		-	-	
	Acenaphthylene	208-96-8	0.5	1	10	14		1	5	10	mg/kg	0.14	U	-	-	
	Anthracene	120-12-7	1	1000	3000	5000		1000	10	2500	mg/kg	0.1		-	-	
	Benzo(ghi)perylene	191-24-2	1	1000	3000	5000		1000	10	2500	mg/kg	0.29		-	-	
	Fluorene	86-73-7	1	1000	3000	5000		1000	10	2500	mg/kg	0.18	U	-	-	
	Phenanthrene	85-01-8	3	10	1000	3000		10	30	532.5	mg/kg	0.3		-	-	
	Dibenzo(a,h)anthracene	53-70-3	0.5	0.7	4	16		0.7	4	4	mg/kg	0.074	U	-	-	
	Indeno(1,2,3-cd)pyrene	193-39-5	1	7	40	160		7	10	40	mg/kg	0.33		-	-	
	Pyrene	129-00-0	4	1000	3000	5000		1000	40	2500	mg/kg	0.6		-	-	
	Aniline	62-53-3		1000	10000			100	100	2500	mg/kg	0.21	U	-	-	
	4-Chloroaniline	106-47-8		1	3	3.3		0.1	0.3	3	mg/kg	0.18	U	-	-	
	Dibenzofuran	132-64-9		100	1000			100	100	500	mg/kg	0.18	U	-	-	
	2-Methylnaphthalene	91-57-6	0.5	0.7	80	240		0.7	5	25	mg/kg	0.074	U	-	-	
	Acetophenone	98-86-2		1000	10000			100	100	2500	mg/kg	0.18	U	-	-	
	2,4,6-Trichlorophenol	88-06-2		0.7	20	19		0.1	2	7	mg/kg	0.074	U	-	-	
	2-Chlorophenol	95-57-8		0.7	100	310		0.1	100	7	mg/kg	0.074	U	-	-	
	2,4-Dichlorophenol	120-83-2		0.7	40	40		0.1	4	7	mg/kg	0.074	U	-	-	
	2,4-Dimethylphenol	105-67-9		0.7	100	1300		0.1	10	7	mg/kg	0.074	U	-	-	
	2-Nitrophenol	88-75-5		100	1000			10	100	500	mg/kg	0.38	U	-	-	
	4-Nitrophenol	100-02-7		100	1000			10	100	500	mg/kg	0.25	U	-	-	
	2,4-Dinitrophenol	51-28-5		3	50	45		0.3	5	30	mg/kg	0.85	U	-	-	
	Pentachlorophenol	87-86-5		3	10	13		0.3	1	10	mg/kg	0.35	U	-	-	
	Phenol	108-95-2		1	20	16		0.1	2	10	mg/kg	0.18	U	-	-	
	2-Methylphenol	95-48-7		500	5000			50	100	2500	mg/kg	0.18	U	-	-	
	3-Methylphenol/4-Methylphenol	108-39-4/106-44-5		500	5000			50	100	2500	mg/kg	0.25	U	-	-	
	2,4,5-Trichlorophenol	95-95-4		4	600	580		0.4	60	40	mg/kg	0.18	U	-	-	
	Pyridine	110-86-1		500	5000			50	100		mg/kg	0.19	U	-	-	
	Biphenyl	92-52-4		0.05	6			0.005	0.6		mg/kg	0.035	U	-	-	
	Total SVOCs						100	100			mg/kg	4.03		-	-	
MCP Total Metals																
	Antimony, Total	7440-36-0	1	20	30	16		20	10	30	mg/kg	2.05	U	-	-	
	Arsenic, Total	7440-38-2	20	20	20	11	40	20	20	20	mg/kg	6.34		-	-	
	Barium, Total	7440-39-3	50	1000	3000	2100		1000	375	2500	mg/kg	37.7		-	-	
	Beryllium, Total	7440-41-7	0.4	90	200	10		90	4	200	mg/kg	0.272		-	-	
	Cadmium, Total	7440-43-9	2	70	100	16	80	70	20	100	mg/kg	0.411	U	-	-	
	Chromium, Total	7440-47-3	30	100	200	570	1000	1000	200	200	mg/kg	17.3		-	-	
	Lead, Total	7439-92-1	100	200	600	110	2000	1000	200	500	600	mg/kg	78.4		-	-
	Mercury, Total	7439-97-6	0.3	20	30	16	10	20	3	30	mg/kg	0.137		-	-	
	Nickel, Total	7440-02-0	20	600	1000	350		600	150	1000	mg/kg	14.2		-	-	
	Selenium, Total	7782-49-2	0.5	400	700	390		400	5	700	mg/kg	2.05	U	-	-	
	Silver, Total	7440-22-4	0.6	100	200	110		100	6	200	mg/kg	0.411	U	-	-	
	Thallium, Total	7440-28-0	0.6	8	60	37		8	6	60	mg/kg	2.05	U	-	-	
	Vanadium, Total	7440-62-2	30	400	700	530		400	225	700	mg/kg	30.3		-	-	
	Zinc, Total	7440-66-6	100	1000	3000	5000		1000	500	2500	mg/kg	84.4		-	-	
MCP Volatile Organics by EPA 5035																
	Methylene chloride	75-09-2		0.1	4	900		0.1	0.01	1	mg/kg	-	-	0.0055	U	
	1,1-Dichloroethane	75-34-3		0.4	9	1300		0.1	0.04	4	mg/kg	-	-	0.0011	U	
	Chloroform	67-66-3		0.2	0.2	410		0.1	0.02	0.2	mg/kg	-	-	0.0016	U	
	Carbon tetrachloride	56-23-5		5	5	220		0.5	0.5	5	mg/kg	-	-	0.0011	U	
	1,2-Dichloropropane	78-87-5		0.1	0.1	280		0.1	0.01	0.1	mg/kg	-	-	0.0011	U	
	Dibromochloromethane	124-48-1		0.005	0.03	340		0.0005	0.0005	0.03	mg/kg	-	-	0.0011	U	
	1,1,2-Trichloroethane	79-00-5		0.1	2	91		0.1	0.01	1	mg/kg	-	-	0.0011	U	
	Tetrachloroethene	127-18-4		1	10	370		0.1	0.1	10	mg/kg	-	-	0.0045		
	Chlorobenzene	108-90-7		1	3	110		0.1	0.1	3	mg/kg	-	-	0.00055	U	
	Trichlorofluoromethane	75-69-4		1000	10000			100	100	2500	mg/kg	-	-	0.0044	U	
	1,2-Dichloroethane	107-06-2		0.1	0.1	310		0.1	0.01	0.1	mg/kg	-	-	0.0011	U	
	1,1,1-Trichloroethane	71-55-6		30	600	1400		3	3	225	mg/kg	-	-	0.00055	U	
	Bromodichloromethane	75-27-4		0.1	0.1	460		0.1	0.01	0.1	mg/kg	-	-	0.00055	U	
	trans-1,3-Dichloropropene	10061-02-6		0.01	0.4	140		0.001	0.001	0.1	mg/kg	-	-	0.0011	U	
	cis-1,3-Dichloropropene	10061-01-5		0.01	0.4	140		0.001	0.001	0.1	mg/kg	-	-	0.00055	U	
	1,3-Dichloropropene, Total	542-75-6		0.01	0.4	140		0.001		0.1	mg/kg	-	-	0.00055	U	
	1,1-Dichloropropene	563-58-6						0.01	0.001	0.1	mg/kg	-	-	0.00055	U	
	Bromoform	75-25-2		0.1	1	800		0.1	0.01	1	mg/kg	-	-	0.0044	U	
	1,1,2,2-Tetrachloroethane	79-34-5		0.005	0.02	19		0.0005	0.0005	0.02	mg/kg	-	-	0.00055	U	
	Benzene	71-43-2		2	200	540		0.2	0.2	20	mg/kg	-	-	0.00055	U	
	Toluene	108-88-3		30	1000	520		3	3	225	mg/kg	-	-	0.0011	U	
	Ethylbenzene	100-41-4		40	1000	230		4	4	300	mg/kg	-	-	0.0011	U	
	Chloromethane	74-87-3		100	1000			10	10	500	mg/kg	-	-	0.0044	U	
	Bromomethane	74-83-9		0.5	0.5	32		0.1	0.05	0.5	mg/kg	-	-	0.0022	U	
	Vinyl chloride	75-01-4		0.7	0.7	12		0.1	0.07	0.7	mg/kg	-	-	0.0011	U	
	Chloroethane	75-00-3		100	1000			10	10	500	mg/kg	-	-	0.0022	U	
	1,1-Dichloroethene	75-35-4		3	40	1600		0.3	0.3	30	mg/kg	-	-	0.0011	U	
	trans-1,2-Dichloroethene	156-60-5		1	1	2500		0.1	0.1	1	mg/kg	-	-	0.0016	U	

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LOCATION											GLC-WASHSTLANDSCAPE-COMP		GLC-WASHSTLANDSCAPE-VOC(3)			
SAMPLING DATE											11/3/2022		11/3/2022			
LAB SAMPLE ID											L2261771-01		L2261771-02			
SAMPLE TYPE											SOIL		SOIL			
	CasNum	MA-BLNS	RCS-1-14	RCS-2-14	BUD-S3/G3	MA-LLAND	MA-ULAND	Saugus	Dudley <RCS-2	TRC-SSSR-GLX	Units	Results	Qual	Results	Qual	
	Trichloroethene	79-01-6		0.3	0.3	810			0.1	0.03	0.3	mg/kg	-	-	0.00055	U
	1,2-Dichlorobenzene	95-50-1		9	100	330			0.9	0.9	90	mg/kg	-	-	0.0022	U
	1,3-Dichlorobenzene	541-73-1		3	200	500			0.3	0.3	30	mg/kg	-	-	0.0022	U
	1,4-Dichlorobenzene	106-46-7		0.7	1	1200			0.1	0.07	1	mg/kg	-	-	0.0022	U
	Methyl tert butyl ether	1634-04-4		0.1	100	500			0.1	0.01	1.9	mg/kg	-	-	0.0022	U
	p/m-Xylene	179601-23-1		100	100	270			10	10	100	mg/kg	-	-	0.0022	U
	o-Xylene	95-47-6		100	100	270			10	10	100	mg/kg	-	-	0.0011	U
	Xylenes, Total	1330-20-7		100	100	270			10	10	100	mg/kg	-	-	0.0011	U
	cis-1,2-Dichloroethene	156-59-2		0.1	0.1	500			0.1	0.01	0.1	mg/kg	-	-	0.0011	U
	1,2-Dichloroethene, Total	540-59-0		0.3					0.1		0.4	mg/kg	-	-	0.0011	U
	Dibromomethane	74-95-3		500	5000				50	50	2500	mg/kg	-	-	0.0022	U
	1,2,3-Trichloropropane	96-18-4		100	1000				10	10	500	mg/kg	-	-	0.0022	U
	Styrene	100-42-5		3	4	630			0.3	0.3	4	mg/kg	-	-	0.0011	U
	Dichlorodifluoromethane	75-71-8		1000	10000				100	100	2500	mg/kg	-	-	0.011	U
	Acetone	67-64-1		6	50	350			0.6	0.6	50	mg/kg	-	-	0.028	U
	Carbon disulfide	75-15-0		100	1000				10	10	500	mg/kg	-	-	0.011	U
	Methyl ethyl ketone	78-93-3		4	50	350			0.4	0.4	40	mg/kg	-	-	0.011	U
	Methyl isobutyl ketone	108-10-1		0.4	50	400			0.1	0.04	4	mg/kg	-	-	0.011	U
	2-Hexanone	591-78-6		100	1000				10	10	500	mg/kg	-	-	0.011	U
	Bromochloromethane	74-97-5							0.01			mg/kg	-	-	0.0022	U
	Tetrahydrofuran	109-99-9		500	5000				50	50	2500	mg/kg	-	-	0.0044	U
	2,2-Dichloropropane	594-20-7							0.01	0.01	0.1	mg/kg	-	-	0.0022	U
	1,2-Dibromoethane	106-93-4		0.1	0.1	0.33			0.1	0.01	0.1	mg/kg	-	-	0.0011	U
	1,3-Dichloropropane	142-28-9		500	5000				50	50	2500	mg/kg	-	-	0.0022	U
	1,1,1,2-Tetrachloroethane	630-20-6		0.1	0.1	150			0.1	0.01	0.1	mg/kg	-	-	0.00055	U
	Bromobenzene	108-86-1		100	1000				10	10	500	mg/kg	-	-	0.0022	U
	n-Butylbenzene	104-51-8							0.01		500	mg/kg	-	-	0.0011	U
	sec-Butylbenzene	135-98-8							0.01		500	mg/kg	-	-	0.0011	U
	tert-Butylbenzene	98-06-6		100	1000				10	10	500	mg/kg	-	-	0.0022	U
	o-Chlorotoluene	95-49-8		100	1000				10	10	500	mg/kg	-	-	0.0022	U
	p-Chlorotoluene	106-43-4							0.01	1	500	mg/kg	-	-	0.0022	U
	1,2-Dibromo-3-chloropropane	96-12-8		10	100				1	1	75	mg/kg	-	-	0.0033	U
	Hexachlorobutadiene	87-68-3		30	100	54			3	3	100	mg/kg	-	-	0.0044	U
	Isopropylbenzene	98-82-8		1000	10000				100	100	2500	mg/kg	-	-	0.0011	U
	p-Isopropyltoluene	99-87-6		100	1000				10	10	500	mg/kg	-	-	0.0011	U
	Naphthalene	91-20-3	0.5	4	20	3000			4	0.4	20	mg/kg	-	-	0.0044	U
	n-Propylbenzene	103-65-1		100	1000				10	10	500	mg/kg	-	-	0.0011	U
	1,2,3-Trichlorobenzene	87-61-6							0.01			mg/kg	-	-	0.0022	U
	1,2,4-Trichlorobenzene	120-82-1		2	6	450			0.2	0.2	6	mg/kg	-	-	0.0022	U
	1,3,5-Trimethylbenzene	108-67-8		10	100				1	1	75	mg/kg	-	-	0.0022	U
	1,2,4-Trimethylbenzene	95-63-6		1000	10000				100	100	2500	mg/kg	-	-	0.0022	U
	Diethyl ether	60-29-7		100	1000				10	10	500	mg/kg	-	-	0.0022	U
	Diisopropyl Ether	108-20-3		100	1000				10	10	500	mg/kg	-	-	0.0022	U
	Ethyl-Tert-Butyl-Ether	637-92-3							0.01			mg/kg	-	-	0.0022	U
	Tertiary-Amyl Methyl Ether	994-05-8							0.01			mg/kg	-	-	0.0022	U
	1,4-Dioxane	123-91-1		0.2	6	450			0.1	0.02	2	mg/kg	-	-	0.088	U
	Total VOCs						10	4				mg/kg	-	-	0.0045	
Petroleum Hydrocarbon Quantitation																
	TPH (C10-C36)	NONE		1000	3000	500	5000	2500	500	1000	2500	mg/kg	92.8		-	-

Gray shading indicates nondetect detection limit is above one or more of the listed criteria, except for MA Background Level Natural soil.

RCS-1-14: MCP 2014 RCS-1 Reportable Concentrations Criteria effective April 25, 2014.

RCS-2-14: MCP 2014 RCS-2 Reportable Concentrations Criteria effective April 25, 2014.

BUD-S3/G3: MassDEP Proposed S3, GW-3 Beneficial Use Determination (BUD) Values Criteria per Draft Interim Guidance Document effective March 18, 2004.

MA-BLNS: Background Level Natural soil current as of 10/24/07

MA-LLAND: Lined Landfill Limits current as of August, 1997

MA-ULAND: UnLined Landfill Limits current as of August, 1997

TRC-SSSR-GLX: Site Specific Soil Reuse Criteria: Vehicle Maintenance Facility for GLX Project Criteria per client-provided Table X February 21, 2018.

MA-Dudley <RCS-2 Acceptance Criteria, Revised January 15, 2020.

Saugus: Acceptance Criteria for Aggregate Industries - Saugus Quarry, Table 1.

U - Not detected at the reported detection limit for the sample.

Table 2 - Soil Characterization Analytical Results
WETA Green Line Extension Project
Somerville, Massachusetts
April 1, 2023 - September 30, 2023

	CAS#	MA-BLNS	RCS-1-14	RCS-2-14	BUD-SVG2	MA-LLAND	MA-ULAND	Sausus	Dutley -RCS-2	TRC-SSR-GLX	SAMPLE TYPE	LOCATION		GLX-DC-WASH ST DRAINAGE - VOC-6		GLX-DC-WASH ST DRAINAGE - COMP			
												LAB SAMPLE ID	12/24/62	SOIL	SOIL	Results	Qual	Results	Qual
General Chemistry																			
Specific Conductance @ 25 C	NONE					8000	4000	2000	2000		umhos/cm				-	350			
Solids, Total															96.7	-	95.9		
pH (H)	1408-02-5							5-9	5-9	2-12.5	SU					7.54			
Cyanide, Reactive	57-12-5							250	250	250	mg/L				-	10	U		
Sulfide, Reactive	NONE							500	500	500	mg/L				-	10	U		
Integrity of Solids																			
Integrity	NONE							>140	Not Intact (NI)	NI					-	-	NI		
MCP Organochlorine Herbicides																			
MCP	93-65-2							3.4			mg/L				-	-	3.4		
MCPA	94-74-6		100	1000				10	100		mg/L				-	-	3.4		
Diazinon	75-99-0		1000	10000				100	1000		mg/L				-	-	0.034		
Diazinon	1918-00-9							50	500		mg/L				-	-	0.034		
Diazinon	123-96-5							0.08			mg/L				-	-	0.034		
2,4-D	94-75-7		100	1000				10	100		mg/L				-	-	0.034		
2,4-DB	94-82-6		100	1000				10	100		mg/L				-	-	0.034		
2,4,5-T	93-76-5		100	1000				10	100		mg/L				-	-	0.034		
2,4,5-TP (Silver)	93-72-1		100	1000				10	100		mg/L				-	-	0.034		
MCP Organochlorine Pesticides																			
Delta-BHC	319-86-8		10	100				1	10		mg/L				-	-	0.00162		
Lindane	58-89-9		0.003	0.5	0.46			0.0003	0.05		mg/L				-	-	0.00054		
Alpha-BHC	318-84-6		50	500				5	50		mg/L				-	-	0.000675		
Beta-BHC	318-85-7		100	100				1	10		mg/L				-	-	0.00162		
Heptachlor	78-44-8		0.3	2	4.2			0.05	0.2		mg/L				-	-	0.00081		
Aldrin	309-00-2		0.08	0.5	0.7			0.05	0.05		mg/L				-	-	0.00162		
Heptachlor epoxide	1024-57-3		0.1	0.9	0.35			0.05	0.05		mg/L				-	-	0.00162		
Endrin	72-20-8		10	20	7			2	2		mg/L				-	-	0.000675		
Endrin ketone	13494-70-5							0.008	2		mg/L				-	-	0.00162		
Dieldrin	60-57-1		0.08	0.5	1			0.05	0.05		mg/L				-	-	0.00101		
4,4'-DDE	72-55-9		6	30	14			0.6	3		mg/L				-	-	0.00162		
4,4'-DDD	72-54-8		6	40	14			0.6	4		mg/L				-	-	0.00162		
4,4'-DDT	50-29-3		6	30	14			0.6	3		mg/L				-	-	0.00304		
Endosulfan I	959-86-8		0.5	1	1.2			0.05	0.1		mg/L				-	-	0.00162		
Endosulfan II	33513-65-9		0.5	1	1.2			0.05	0.1		mg/L				-	-	0.00162		
Endosulfan sulfate	1031-07-8							0.008			mg/L				-	-	0.000675		
Methoxychlor	72-43-5		200	400	140			20	40		mg/L				-	-	0.00304		
Chlordane	57-74-9		0.7	30	27			0.07	3		mg/L				-	-	0.0135		
Hexachlorobenzene	118-74-1		0.7	0.8	15			0.07	0.8	0.8	mg/L				-	-	0.00162		
MCP Polychlorinated Biphenyls																			
Aroclor 1016	12674-11-2		1	4	1.6				4		mg/L				-	-	0.0503		
Aroclor 1221	11104-28-2		1	4	1.6				4		mg/L				-	-	0.0503		
Aroclor 1238	11411-16-8		1	4	1.6				4		mg/L				-	-	0.0503		
Aroclor 1248	93469-21-9		1	4	1.6				4		mg/L				-	-	0.0503		
Aroclor 1254	12027-29-9		1	4	1.6				4		mg/L				-	-	0.0503		
Aroclor 1260	11097-69-1		1	4	1.6				4		mg/L				-	-	0.0503		
Aroclor 1262	11098-82-5		1	4	1.6				4		mg/L				-	-	0.0503		
Aroclor 1268	37324-23-5		1	4	1.6				4		mg/L				-	-	0.0503		
Aroclor 1280	11100-14-4		1	4	1.6				4		mg/L				-	-	0.0503		
PCBs, Total	1336-36-3		1	4	1.6	2	2	0.1	0.1	4	mg/L				-	-	0.0503		
MCP Semi-aromatic Organics																			
Acenaphthene	83-32-9	0.5	4	3000	5000			4	5	69	mg/L				-	-	0.18		
1,2,4-Trichlorobenzene	120-82-1		2	6	450			0.2	0.6	6	mg/L				-	-	0.17		
Heachlorobenzene	118-74-1		0.7	0.8	15			0.1	0.08	0.8	mg/L				-	-	0.17		
Bis(2-chloroethyl)ether	111-44-4		0.7	0.7	4.7			0.1	0.07	0.7	mg/L				-	-	0.072		
2-Chloronaphthalene	91-58-7			1000	10000			100	100	2500	mg/L				-	-	0.17		
1,2-Dichlorobenzene	95-50-7		9	100	330			0.9	10	80	mg/L				-	-	0.17		
1,3-Dichlorobenzene	541-73-1		3	200	900			0.3	20	30	mg/L				-	-	0.17		
1,4-Dichlorobenzene	106-46-7		0.7	10	1200			0.1	0.1	1	mg/L				-	-	0.072		
3,5-Dichlorobenzidine	91-04-1		3	20	20			0.1	2	20	mg/L				-	-	0.17		
2,4-Dinitrofluorene	121-14-2		0.7	10	36			0.1	1	7	mg/L				-	-	0.072		
2,6-Dinitrofluorene	506-20-2			100	1000			0.67	10	500	mg/L				-	-	0.17		
Acenaphthene	103-33-3							0.67	50	375	mg/L				-	-	0.17		
Fluoranthene	208-44-0	4	1000	3000	5000			100	40	2500	mg/L				-	-	0.17		
4-Bromophenyl phenyl ether	101-55-3		100	1000				10	100	500	mg/L				-	-	0.17		
Bis(2-chloroethoxy)ether	106-60-1		0.7	0.7	4.7			0.1	0.07	0.7	mg/L				-	-	0.072		
Bis(2-chloroethoxy)methane	111-91-1			500	5000			50	100	2500	mg/L				-	-	0.18		
Heachlorobenzene	67-74-9		0.7	30	100	54		3	10	100	mg/L				-	-	0.17		
Hexachlorobenzene	67-72-1		0.7	3	74			0.1	0.3	3	mg/L				-	-	0.072		
Isochlorobenzene	78-59-1			100	1000			10	100	500	mg/L				-	-	0.15		
Naphthalene	91-03-3	0.5	4	20	3000			4	5	20	mg/L				-	-	0.17		
Nitrobenzene	98-95-3			500	5000			50	100	2500	mg/L				-	-	0.15		
Bis(2-ethylhexyl)phthalate	117-81-7		90	600	230			60	60	600	mg/L				-	-	2.2		
Bis(2-ethylhexyl)phthalate	95-68-7		100	1000				10	100	500	mg/L				-	-	0.17		
Di-n-butylphthalate	84-74-5		50	500				5	50	375	mg/L				-	-	0.17		
Di-n-octylphthalate	117-84-0		1000	10000				100	100	2500	mg/L				-	-	0.17		
Diethyl phthalate	84-68-2		10	200	290			10	20	75	mg/L				-	-	0.17		
Dimethyl phthalate	131-11-3		0.7	50	550			0.1	5	7	mg/L				-	-	0.072		
Benzofluoranthene	56-55-3	2	7	40	160			7	20	40	mg/L				-	-	4.7		
Benzofluoranthene	50-32-8	2	2	7	16			2	7	7	mg/L				-	-	6.3		
Benzofluoranthene	205-99-2	2	7	40	160			7	20	40	mg/L				-	-	6.9		
Benzofluoranthene	207-08-6	1	70	400	1600			70	10	400	mg/L				-	-	2.7		
Chrysene	218-01-9	2	70	400	3400			70	20	400	mg/L				-	-	6.6		
Acenaphthylene	208-36-8	0.5	1	10	14			1	5	10	mg/L				-	-	0.18		
Anthracene	120-12-7	1	1000	3000	5000			1000	10	2500	mg/L				-	-	0.63		
Benzofluoranthene	191-24-2	1	1000	3000	5000			1000	10	2500	mg/L				-	-	4.6		
Fluorene	86-73-7		1000	3000	500														

Appendix D Laboratory Testing Reports



ANALYTICAL REPORT

Lab Number:	L2503615
Client:	GEI Consultants 400 Unicorn Park Drive Woburn, MA 01801
ATTN:	Molly Forrest
Phone:	(781) 721-4016
Project Name:	TUFTS STREET
Project Number:	045163
Report Date:	01/27/25

The original project report/data package is held by Pace Analytical Services. This report/data package is paginated and should be reproduced only in its entirety. Pace Analytical Services holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2503615
Report Date: 01/27/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2503615-01	045163-MW-301	WATER	SOMERVILLE, MA	01/20/25 14:45	01/22/25
L2503615-02	045163-MW-104R	WATER	SOMERVILLE, MA	01/20/25 14:10	01/22/25
L2503615-03	045163-MW-115/115R	WATER	SOMERVILLE, MA	01/20/25 15:30	01/22/25

Project Name: TUFTS STREET

Lab Number: L2503615

Project Number: 045163

Report Date: 01/27/25

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES
A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	NO
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	NO
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	YES
For any questions answered "No", please refer to the case narrative section on the following page(s).		

Please note that sample matrix information is located in the Sample Results section of this report.



Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2503615
Report Date: 01/27/25

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Pace Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Pace's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Pace Project Manager and made arrangements for Pace to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2503615
Report Date: 01/27/25

Case Narrative (continued)

MCP Related Narratives

Volatile Organics

In reference to question G:

L2503615-02D: One or more of the target analytes did not achieve the requested CAM reporting limits.

In reference to question H:

L2503615-01, -02D, and -03: Initial Calibration did not meet:

Lowest Calibration Standard Minimum Response Factor: 1,4-dioxane (0.002), 1,1,2-trichloroethane (0.1858)

Average Response Factor: 1,4-dioxane, 1,1,2-trichloroethane

L2503615-01, -02D, and -03: The associated continuing calibration standard is outside the acceptance criteria for several compounds; however, it is within overall method allowances. Associated results are considered to be biased high if the %D is negative and biased low if the %D is positive. A copy of the continuing calibration standard is included as an addendum to this report.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:



Kelly O'Neill

Title: Technical Director/Representative

Date: 01/27/25

QC OUTLIER SUMMARY REPORT

Project Name: TUFTS STREET**Lab Number:** L2503615**Project Number:** 045163**Report Date:** 01/27/25

Method	Client ID (Native ID)	Lab ID	Parameter	QC Type	Recovery/RPD (%)	QC Limits (%)	Associated Samples	Data Quality Assessment
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There are no QC Outliers associated with this report.

ORGANICS

VOLATILES

Project Name: TUFTS STREET**Lab Number:** L2503615**Project Number:** 045163**Report Date:** 01/27/25**SAMPLE RESULTS**

Lab ID: L2503615-01
 Client ID: 045163-MW-301
 Sample Location: SOMERVILLE, MA

Date Collected: 01/20/25 14:45
 Date Received: 01/22/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 141,8260D
 Analytical Date: 01/24/25 08:31
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2503615**Project Number:** 045163**Report Date:** 01/27/25**SAMPLE RESULTS**

Lab ID: L2503615-01
 Client ID: 045163-MW-301
 Sample Location: SOMERVILLE, MA

Date Collected: 01/20/25 14:45
 Date Received: 01/22/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2503615**Project Number:** 045163**Report Date:** 01/27/25**SAMPLE RESULTS**

Lab ID: L2503615-01
 Client ID: 045163-MW-301
 Sample Location: SOMERVILLE, MA

Date Collected: 01/20/25 14:45
 Date Received: 01/22/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	99		70-130

Project Name: TUFTS STREET**Lab Number:** L2503615**Project Number:** 045163**Report Date:** 01/27/25**SAMPLE RESULTS**

Lab ID: L2503615-02 D

Date Collected: 01/20/25 14:10

Client ID: 045163-MW-104R

Date Received: 01/22/25

Sample Location: SOMERVILLE, MA

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Analytical Method: 141,8260D

Analytical Date: 01/24/25 09:24

Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	10	--	5
1,1-Dichloroethane	ND		ug/l	5.0	--	5
Chloroform	ND		ug/l	5.0	--	5
Carbon tetrachloride	ND		ug/l	5.0	--	5
1,2-Dichloropropane	ND		ug/l	5.0	--	5
Dibromochloromethane	ND		ug/l	5.0	--	5
1,1,2-Trichloroethane	ND		ug/l	5.0	--	5
Tetrachloroethene	690		ug/l	5.0	--	5
Chlorobenzene	ND		ug/l	5.0	--	5
Trichlorofluoromethane	ND		ug/l	10	--	5
1,2-Dichloroethane	ND		ug/l	5.0	--	5
1,1,1-Trichloroethane	6.8		ug/l	5.0	--	5
Bromodichloromethane	ND		ug/l	5.0	--	5
trans-1,3-Dichloropropene	ND		ug/l	2.0	--	5
cis-1,3-Dichloropropene	ND		ug/l	2.0	--	5
1,3-Dichloropropene, Total	ND		ug/l	2.0	--	5
1,1-Dichloropropene	ND		ug/l	10	--	5
Bromoform	ND		ug/l	10	--	5
1,1,2,2-Tetrachloroethane	ND		ug/l	5.0	--	5
Benzene	ND		ug/l	2.5	--	5
Toluene	ND		ug/l	5.0	--	5
Ethylbenzene	ND		ug/l	5.0	--	5
Chloromethane	ND		ug/l	10	--	5
Bromomethane	ND		ug/l	10	--	5
Vinyl chloride	ND		ug/l	5.0	--	5
Chloroethane	ND		ug/l	10	--	5
1,1-Dichloroethene	ND		ug/l	5.0	--	5
trans-1,2-Dichloroethene	ND		ug/l	5.0	--	5



Project Name: TUFTS STREET**Lab Number:** L2503615**Project Number:** 045163**Report Date:** 01/27/25**SAMPLE RESULTS**

Lab ID: L2503615-02 D

Date Collected: 01/20/25 14:10

Client ID: 045163-MW-104R

Date Received: 01/22/25

Sample Location: SOMERVILLE, MA

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	28		ug/l	5.0	--	5
1,2-Dichlorobenzene	ND		ug/l	5.0	--	5
1,3-Dichlorobenzene	ND		ug/l	5.0	--	5
1,4-Dichlorobenzene	ND		ug/l	5.0	--	5
Methyl tert butyl ether	ND		ug/l	10	--	5
p/m-Xylene	ND		ug/l	10	--	5
o-Xylene	ND		ug/l	5.0	--	5
Xylenes, Total	ND		ug/l	5.0	--	5
cis-1,2-Dichloroethene	13		ug/l	5.0	--	5
1,2-Dichloroethene, Total	13		ug/l	5.0	--	5
Dibromomethane	ND		ug/l	10	--	5
1,2,3-Trichloropropane	ND		ug/l	10	--	5
Styrene	ND		ug/l	5.0	--	5
Dichlorodifluoromethane	ND		ug/l	10	--	5
Acetone	ND		ug/l	25	--	5
Carbon disulfide	ND		ug/l	10	--	5
Methyl ethyl ketone	ND		ug/l	25	--	5
Methyl isobutyl ketone	ND		ug/l	25	--	5
2-Hexanone	ND		ug/l	25	--	5
Bromochloromethane	ND		ug/l	10	--	5
Tetrahydrofuran	ND		ug/l	10	--	5
2,2-Dichloropropane	ND		ug/l	10	--	5
1,2-Dibromoethane	ND		ug/l	10	--	5
1,3-Dichloropropane	ND		ug/l	10	--	5
1,1,1,2-Tetrachloroethane	ND		ug/l	5.0	--	5
Bromobenzene	ND		ug/l	10	--	5
n-Butylbenzene	ND		ug/l	10	--	5
sec-Butylbenzene	ND		ug/l	10	--	5
tert-Butylbenzene	ND		ug/l	10	--	5
o-Chlorotoluene	ND		ug/l	10	--	5
p-Chlorotoluene	ND		ug/l	10	--	5
1,2-Dibromo-3-chloropropane	ND		ug/l	10	--	5
Hexachlorobutadiene	ND		ug/l	3.0	--	5
Isopropylbenzene	ND		ug/l	10	--	5
p-Isopropyltoluene	ND		ug/l	10	--	5
Naphthalene	ND		ug/l	10	--	5
n-Propylbenzene	ND		ug/l	10	--	5



Project Name: TUFTS STREET**Lab Number:** L2503615**Project Number:** 045163**Report Date:** 01/27/25**SAMPLE RESULTS**

Lab ID: L2503615-02 D

Date Collected: 01/20/25 14:10

Client ID: 045163-MW-104R

Date Received: 01/22/25

Sample Location: SOMERVILLE, MA

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	10	--	5
1,2,4-Trichlorobenzene	ND		ug/l	10	--	5
1,3,5-Trimethylbenzene	ND		ug/l	10	--	5
1,2,4-Trimethylbenzene	ND		ug/l	10	--	5
Diethyl ether	ND		ug/l	10	--	5
Diisopropyl Ether	ND		ug/l	10	--	5
Ethyl-Tert-Butyl-Ether	ND		ug/l	10	--	5
Tertiary-Amyl Methyl Ether	ND		ug/l	10	--	5
1,4-Dioxane	ND		ug/l	1200	--	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	94		70-130

Project Name: TUFTS STREET**Lab Number:** L2503615**Project Number:** 045163**Report Date:** 01/27/25**SAMPLE RESULTS**

Lab ID: L2503615-03
 Client ID: 045163-MW-115/115R
 Sample Location: SOMERVILLE, MA

Date Collected: 01/20/25 15:30
 Date Received: 01/22/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 141,8260D
 Analytical Date: 01/24/25 08:57
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2503615**Project Number:** 045163**Report Date:** 01/27/25**SAMPLE RESULTS**

Lab ID: L2503615-03
 Client ID: 045163-MW-115/115R
 Sample Location: SOMERVILLE, MA

Date Collected: 01/20/25 15:30
 Date Received: 01/22/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2503615**Project Number:** 045163**Report Date:** 01/27/25**SAMPLE RESULTS**

Lab ID: L2503615-03

Date Collected: 01/20/25 15:30

Client ID: 045163-MW-115/115R

Date Received: 01/22/25

Sample Location: SOMERVILLE, MA

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	102		70-130

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2503615
Report Date: 01/27/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 141,8260D
 Analytical Date: 01/24/25 04:57
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-03 Batch: WG2023778-5					
Methylene chloride	ND		ug/l	2.0	--
1,1-Dichloroethane	ND		ug/l	1.0	--
Chloroform	ND		ug/l	1.0	--
Carbon tetrachloride	ND		ug/l	1.0	--
1,2-Dichloropropane	ND		ug/l	1.0	--
Dibromochloromethane	ND		ug/l	1.0	--
1,1,2-Trichloroethane	ND		ug/l	1.0	--
Tetrachloroethene	ND		ug/l	1.0	--
Chlorobenzene	ND		ug/l	1.0	--
Trichlorofluoromethane	ND		ug/l	2.0	--
1,2-Dichloroethane	ND		ug/l	1.0	--
1,1,1-Trichloroethane	ND		ug/l	1.0	--
Bromodichloromethane	ND		ug/l	1.0	--
trans-1,3-Dichloropropene	ND		ug/l	0.40	--
cis-1,3-Dichloropropene	ND		ug/l	0.40	--
1,3-Dichloropropene, Total	ND		ug/l	0.40	--
1,1-Dichloropropene	ND		ug/l	2.0	--
Bromoform	ND		ug/l	2.0	--
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--
Benzene	ND		ug/l	0.50	--
Toluene	ND		ug/l	1.0	--
Ethylbenzene	ND		ug/l	1.0	--
Chloromethane	ND		ug/l	2.0	--
Bromomethane	ND		ug/l	2.0	--
Vinyl chloride	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	2.0	--
1,1-Dichloroethene	ND		ug/l	1.0	--
trans-1,2-Dichloroethene	ND		ug/l	1.0	--
Trichloroethene	ND		ug/l	1.0	--



Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2503615
Report Date: 01/27/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 141,8260D
 Analytical Date: 01/24/25 04:57
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-03 Batch: WG2023778-5					
1,2-Dichlorobenzene	ND		ug/l	1.0	--
1,3-Dichlorobenzene	ND		ug/l	1.0	--
1,4-Dichlorobenzene	ND		ug/l	1.0	--
Methyl tert butyl ether	ND		ug/l	2.0	--
p/m-Xylene	ND		ug/l	2.0	--
o-Xylene	ND		ug/l	1.0	--
Xylenes, Total	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	1.0	--
1,2-Dichloroethene, Total	ND		ug/l	1.0	--
Dibromomethane	ND		ug/l	2.0	--
1,2,3-Trichloropropane	ND		ug/l	2.0	--
Styrene	ND		ug/l	1.0	--
Dichlorodifluoromethane	ND		ug/l	2.0	--
Acetone	ND		ug/l	5.0	--
Carbon disulfide	ND		ug/l	2.0	--
Methyl ethyl ketone	ND		ug/l	5.0	--
Methyl isobutyl ketone	ND		ug/l	5.0	--
2-Hexanone	ND		ug/l	5.0	--
Bromochloromethane	ND		ug/l	2.0	--
Tetrahydrofuran	ND		ug/l	2.0	--
2,2-Dichloropropane	ND		ug/l	2.0	--
1,2-Dibromoethane	ND		ug/l	2.0	--
1,3-Dichloropropane	ND		ug/l	2.0	--
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--
Bromobenzene	ND		ug/l	2.0	--
n-Butylbenzene	ND		ug/l	2.0	--
sec-Butylbenzene	ND		ug/l	2.0	--
tert-Butylbenzene	ND		ug/l	2.0	--
o-Chlorotoluene	ND		ug/l	2.0	--



Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2503615
Report Date: 01/27/25

Method Blank Analysis Batch Quality Control

Analytical Method: 141,8260D
Analytical Date: 01/24/25 04:57
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-03 Batch: WG2023778-5					
p-Chlorotoluene	ND		ug/l	2.0	--
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--
Hexachlorobutadiene	ND		ug/l	0.60	--
Isopropylbenzene	ND		ug/l	2.0	--
p-Isopropyltoluene	ND		ug/l	2.0	--
Naphthalene	ND		ug/l	2.0	--
n-Propylbenzene	ND		ug/l	2.0	--
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--
Diethyl ether	ND		ug/l	2.0	--
Diisopropyl Ether	ND		ug/l	2.0	--
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--
1,4-Dioxane	ND		ug/l	250	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	100		70-130



Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2503615

Report Date: 01/27/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-03 Batch: WG2023778-3 WG2023778-4								
Methylene chloride	92		95		70-130	3		20
1,1-Dichloroethane	98		98		70-130	0		20
Chloroform	98		95		70-130	3		20
Carbon tetrachloride	100		100		70-130	0		20
1,2-Dichloropropane	100		100		70-130	0		20
Dibromochloromethane	99		100		70-130	1		20
1,1,2-Trichloroethane	100		99		70-130	1		20
Tetrachloroethene	100		100		70-130	0		20
Chlorobenzene	100		100		70-130	0		20
Trichlorofluoromethane	97		96		70-130	1		20
1,2-Dichloroethane	99		97		70-130	2		20
1,1,1-Trichloroethane	100		99		70-130	1		20
Bromodichloromethane	100		97		70-130	3		20
trans-1,3-Dichloropropene	100		100		70-130	0		20
cis-1,3-Dichloropropene	100		100		70-130	0		20
1,1-Dichloropropene	100		100		70-130	0		20
Bromoform	99		96		70-130	3		20
1,1,2,2-Tetrachloroethane	100		99		70-130	1		20
Benzene	100		100		70-130	0		20
Toluene	100		100		70-130	0		20
Ethylbenzene	100		100		70-130	0		20
Chloromethane	100		96		70-130	4		20
Bromomethane	74		76		70-130	3		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2503615

Report Date: 01/27/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-03 Batch: WG2023778-3 WG2023778-4								
Vinyl chloride	88		88		70-130	0		20
Chloroethane	84		80		70-130	5		20
1,1-Dichloroethene	97		96		70-130	1		20
trans-1,2-Dichloroethene	100		100		70-130	0		20
Trichloroethene	100		100		70-130	0		20
1,2-Dichlorobenzene	100		100		70-130	0		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	100		98		70-130	2		20
Methyl tert butyl ether	100		100		70-130	0		20
p/m-Xylene	100		100		70-130	0		20
o-Xylene	100		100		70-130	0		20
cis-1,2-Dichloroethene	100		97		70-130	3		20
Dibromomethane	100		96		70-130	4		20
1,2,3-Trichloropropane	100		98		70-130	2		20
Styrene	100		95		70-130	5		20
Dichlorodifluoromethane	100		100		70-130	0		20
Acetone	98		80		70-130	20		20
Carbon disulfide	98		98		70-130	0		20
Methyl ethyl ketone	94		84		70-130	11		20
Methyl isobutyl ketone	100		100		70-130	0		20
2-Hexanone	100		95		70-130	5		20
Bromochloromethane	100		100		70-130	0		20
Tetrahydrofuran	100		96		70-130	4		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2503615

Report Date: 01/27/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-03 Batch: WG2023778-3 WG2023778-4								
2,2-Dichloropropane	96		94		70-130	2		20
1,2-Dibromoethane	100		100		70-130	0		20
1,3-Dichloropropane	100		100		70-130	0		20
1,1,1,2-Tetrachloroethane	100		100		70-130	0		20
Bromobenzene	100		99		70-130	1		20
n-Butylbenzene	98		96		70-130	2		20
sec-Butylbenzene	100		98		70-130	2		20
tert-Butylbenzene	100		98		70-130	2		20
o-Chlorotoluene	100		98		70-130	2		20
p-Chlorotoluene	100		98		70-130	2		20
1,2-Dibromo-3-chloropropane	100		96		70-130	4		20
Hexachlorobutadiene	98		94		70-130	4		20
Isopropylbenzene	100		100		70-130	0		20
p-Isopropyltoluene	100		98		70-130	2		20
Naphthalene	97		94		70-130	3		20
n-Propylbenzene	100		100		70-130	0		20
1,2,3-Trichlorobenzene	100		96		70-130	4		20
1,2,4-Trichlorobenzene	100		94		70-130	6		20
1,3,5-Trimethylbenzene	100		99		70-130	1		20
1,2,4-Trimethylbenzene	100		97		70-130	3		20
Diethyl ether	100		100		70-130	0		20
Diisopropyl Ether	100		100		70-130	0		20
Ethyl-Tert-Butyl-Ether	100		100		70-130	0		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2503615

Report Date: 01/27/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-03 Batch: WG2023778-3 WG2023778-4								
Tertiary-Amyl Methyl Ether	100		100		70-130	0		20
1,4-Dioxane	96		88		70-130	9		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	100		93		70-130
Toluene-d8	100		102		70-130
4-Bromofluorobenzene	98		99		70-130
Dibromofluoromethane	93		94		70-130

Project Name: TUFTS STREET**Lab Number:** L2503615**Project Number:** 045163**Report Date:** 01/27/25**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information**Cooler** **Custody Seal**

A Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2503615-01A	Vial HCl preserved	A	NA		5.0	Y	Absent		MCP-8260-21(14)
L2503615-01B	Vial HCl preserved	A	NA		5.0	Y	Absent		MCP-8260-21(14)
L2503615-01C	Vial HCl preserved	A	NA		5.0	Y	Absent		MCP-8260-21(14)
L2503615-02A	Vial HCl preserved	A	NA		5.0	Y	Absent		MCP-8260-21(14)
L2503615-02B	Vial HCl preserved	A	NA		5.0	Y	Absent		MCP-8260-21(14)
L2503615-02C	Vial HCl preserved	A	NA		5.0	Y	Absent		MCP-8260-21(14)
L2503615-03A	Vial HCl preserved	A	NA		5.0	Y	Absent		MCP-8260-21(14)
L2503615-03B	Vial HCl preserved	A	NA		5.0	Y	Absent		MCP-8260-21(14)
L2503615-03C	Vial HCl preserved	A	NA		5.0	Y	Absent		MCP-8260-21(14)

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2503615
Report Date: 01/27/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report



Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2503615
Report Date: 01/27/25

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

Report Format: Data Usability Report



Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2503615
Report Date: 01/27/25

Data Qualifiers

- ND** - Not detected at the reporting limit (RL) for the sample.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2503615
Report Date: 01/27/25

REFERENCES

- 141 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA and IIB, November 2021.

LIMITATION OF LIABILITIES

Pace Analytical Services performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Pace Analytical Services shall be to re-perform the work at it's own expense. In no event shall Pace Analytical Services be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Pace Analytical Services.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Pace Analytical Services LLCFacility: **Northeast**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

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Published Date: 01/24/2025

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Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**EPA 624.1:** m/p-xylene, o-xylene, Naphthalene**EPA 625.1:** alpha-Terpineol**EPA 8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****SM 2540D:** TSS.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

MADEP-APH.**Nonpotable Water:** EPA RSK-175 Dissolved Gases**Biological Tissue Matrix:** EPA 3050B**Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048****EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048**Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)**

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LCHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables).**Microbiology:** SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.** **EPA 522, EPA 537.1.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1 Hg.****SM2340B**

Pace Analytical Services LLCID No.: **17873**Facility: **Northeast**

Revision 27

Department: **Quality Assurance**

Published Date: 01/24/2025

Title: **Certificate/Approval Program Summary**

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Certification IDs:**Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**

CT PH-0826, IL 200077, IN C-MA-03, KY JY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 3090, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048

ANAB/DoD L2474, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

For a complete listing of analytes and methods, please contact your Project Manager.

Method Blank Summary Form 4 Volatiles

Client : GEI Consultants
Project Name : TUFTS STREET
Lab Sample ID : WG2023778-5
Instrument ID : JACK
Matrix : WATER

Lab Number : L2503615
Project Number : 045163
Lab File ID : J250124A04
Analysis Date : 01/24/25 04:57

Client Sample No.	Lab Sample ID	Analysis Date
WG2023778-3LCS	WG2023778-3	01/24/25 03:37
WG2023778-4LCSD	WG2023778-4	01/24/25 04:04
045163-MW-301	L2503615-01	01/24/25 08:31
045163-MW-115/115R	L2503615-03	01/24/25 08:57
045163-MW-104R	L2503615-02D	01/24/25 09:24

Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : TUFTS STREET
 Instrument ID : JACK
 Lab File ID : J250124A01
 Sample No : WG2023778-2
 Channel :

Lab Number : L2503615
 Project Number : 045163
 Calibration Date : 01/24/25 03:37
 Init. Calib. Date(s) : 12/19/24 12/19/24
 Init. Calib. Times : 07:05 10:11

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	76	0
Dichlorodifluoromethane	0.314	0.322	-	-2.5	20	76	0
Chloromethane	0.386	0.385	-	0.3	20	74	0
Vinyl chloride	0.352	0.31	-	11.9	20	62	0
Bromomethane	0.193	0.144	-	25.4*	20	54	0
Chloroethane	0.187	0.157	-	16	20	61	0
Trichlorofluoromethane	0.413	0.4	-	3.1	20	70	0
Ethyl ether	0.107	0.107	-	0	20	77	0
1,1-Dichloroethene	0.241	0.234	-	2.9	20	71	0
Carbon disulfide	0.758	0.746	-	1.6	20	73	0
Freon-113	0.248	0.253	-	-2	20	73	0
Acrolein	0.042	0.043	-	-2.4	20	80	-.01
Methylene chloride	0.268	0.247	-	7.8	20	70	0
Acetone	0.079	0.077	-	2.5	20	80	0
trans-1,2-Dichloroethene	0.254	0.257	-	-1.2	20	75	0
Methyl acetate	0.155	0.169	-	-9	20	92	0
Methyl tert-butyl ether	0.602	0.628	-	-4.3	20	82	0
tert-Butyl alcohol	0.021	0.023	-	-9.5	20	84	-.01
Diisopropyl ether	0.947	0.994	-	-5	20	83	0
1,1-Dichloroethane	0.539	0.53	-	1.7	20	73	0
Halothane	0.202	0.208	-	-3	20	75	0
Acrylonitrile	0.085	0.088	-	-3.5	20	83	-.01
Ethyl tert-butyl ether	0.779	0.787	-	-1	20	81	0
Vinyl acetate	0.397	0.704	-	-77.3*	20	148	0
cis-1,2-Dichloroethene	0.282	0.282	-	0	20	73	0
2,2-Dichloropropane	0.441	0.426	-	3.4	20	74	0
Bromochloromethane	0.13	0.135	-	-3.8	20	76	0
Cyclohexane	0.56	0.584	-	-4.3	20	77	0
Chloroform	0.472	0.464	-	1.7	20	75	0
Ethyl acetate	0.233	0.27	-	-15.9	20	93	0
Carbon tetrachloride	0.373	0.385	-	-3.2	20	75	0
Tetrahydrofuran	0.095	0.094	-	1.1	20	86	0
Dibromofluoromethane	0.279	0.26	-	6.8	20	71	0
1,1,1-Trichloroethane	0.42	0.428	-	-1.9	20	75	0
2-Butanone	0.114	0.108	-	5.3	20	83	0
1,1-Dichloropropene	0.332	0.347	-	-4.5	20	77	0
Benzene	1.004	1.036	-	-3.2	20	77	0
tert-Amyl methyl ether	0.615	0.64	-	-4.1	20	83	0
1,2-Dichloroethane-d4	0.324	0.325	-	-0.3	20	79	0
1,2-Dichloroethane	0.347	0.342	-	1.4	20	74	0
Methyl cyclohexane	0.467	0.469	-	-0.4	20	78	0
Trichloroethene	0.263	0.271	-	-3	20	77	0
Dibromomethane	0.15	0.15	-	0	20	76	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : TUFTS STREET
 Instrument ID : JACK
 Lab File ID : J250124A01
 Sample No : WG2023778-2
 Channel :

Lab Number : L2503615
 Project Number : 045163
 Calibration Date : 01/24/25 03:37
 Init. Calib. Date(s) : 12/19/24 12/19/24
 Init. Calib. Times : 07:05 10:11

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,2-Dichloropropane	0.267	0.269	-	-0.7	20	75	0
2-Chloroethyl vinyl ether	0.153	0.134	-	12.4	20	69	0
Bromodichloromethane	0.374	0.378	-	-1.1	20	77	0
1,4-Dioxane	0.00196	0.00189*	-	3.6	20	65	0
cis-1,3-Dichloropropene	0.393	0.413	-	-5.1	20	80	0
Chlorobenzene-d5	1	1	-	0	20	76	0
Toluene-d8	1.297	1.294	-	0.2	20	76	0
Toluene	0.836	0.839	-	-0.4	20	76	0
4-Methyl-2-pentanone	0.108	0.109	-	-0.9	20	81	0
Tetrachloroethene	0.361	0.369	-	-2.2	20	77	0
trans-1,3-Dichloropropene	0.446	0.464	-	-4	20	80	0
Ethyl methacrylate	0.336	0.339	-	-0.9	20	78	0
1,1,2-Trichloroethane	0.198	0.204	-	-3	20	82	0
Chlorodibromomethane	0.329	0.327	-	0.6	20	77	0
1,3-Dichloropropane	0.435	0.453	-	-4.1	20	81	0
1,2-Dibromoethane	0.264	0.271	-	-2.7	20	79	0
2-Hexanone	0.232	0.239	-	-3	20	85	0
Chlorobenzene	0.906	0.931	-	-2.8	20	77	0
Ethylbenzene	1.616	1.637	-	-1.3	20	76	0
1,1,1,2-Tetrachloroethane	0.321	0.331	-	-3.1	20	80	0
p/m Xylene	0.645	0.662	-	-2.6	20	76	0
o Xylene	0.62	0.628	-	-1.3	20	76	0
Styrene	1.05	1.04	-	1	20	75	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	73	0
Bromoform	0.377	0.374	-	0.8	20	76	0
Isopropylbenzene	2.944	3.017	-	-2.5	20	75	0
4-Bromofluorobenzene	0.871	0.856	-	1.7	20	72	0
Bromobenzene	0.691	0.718	-	-3.9	20	76	0
n-Propylbenzene	3.475	3.6	-	-3.6	20	76	0
1,4-Dichlorobutane	0.946	0.952	-	-0.6	20	77	0
1,1,2,2-Tetrachloroethane	0.617	0.641	-	-3.9	20	79	0
4-Ethyltoluene	2.978	3.078	-	-3.4	20	75	0
2-Chlorotoluene	2.298	2.319	-	-0.9	20	74	0
1,3,5-Trimethylbenzene	2.556	2.607	-	-2	20	74	0
1,2,3-Trichloropropane	0.498	0.507	-	-1.8	20	79	0
trans-1,4-Dichloro-2-buten	0.23	0.226	-	1.7	20	75	0
4-Chlorotoluene	2.089	2.082	-	0.3	20	74	0
tert-Butylbenzene	2.14	2.18	-	-1.9	20	75	0
1,2,4-Trimethylbenzene	2.516	2.538	-	-0.9	20	74	0
sec-Butylbenzene	3.306	3.339	-	-1	20	74	0
p-Isopropyltoluene	2.832	2.91	-	-2.8	20	75	0
1,3-Dichlorobenzene	1.375	1.446	-	-5.2	20	77	0
1,4-Dichlorobenzene	1.398	1.453	-	-3.9	20	76	0

* Value outside of QC limits.

Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : TUFTS STREET
 Instrument ID : JACK
 Lab File ID : J250124A01
 Sample No : WG2023778-2
 Channel :

Lab Number : L2503615
 Project Number : 045163
 Calibration Date : 01/24/25 03:37
 Init. Calib. Date(s) : 12/19/24 12/19/24
 Init. Calib. Times : 07:05 10:11

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
p-Diethylbenzene	1.708	1.722	-	-0.8	20	73	0
n-Butylbenzene	2.494	2.457	-	1.5	20	71	0
1,2-Dichlorobenzene	1.294	1.333	-	-3	20	76	0
1,2,4,5-Tetramethylbenzene	2.592	2.5	-	3.5	20	71	0
1,2-Dibromo-3-chloropropan	0.12	0.12	-	0	20	72	0
1,3,5-Trichlorobenzene	1.073	1.061	-	1.1	20	72	0
Hexachlorobutadiene	0.437	0.427	-	2.3	20	72	0
1,2,4-Trichlorobenzene	0.917	0.925	-	-0.9	20	73	0
Naphthalene	2.339	2.279	-	2.6	20	72	0
1,2,3-Trichlorobenzene	0.845	0.851	-	-0.7	20	74	0

* Value outside of QC limits.



ANALYTICAL REPORT

Lab Number:	L2513286
Client:	GEI Consultants 400 Unicorn Park Drive Woburn, MA 01801
ATTN:	Chris Coner
Phone:	(781) 721-4000
Project Name:	TUFTS STREET
Project Number:	045163
Report Date:	03/17/25

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2513286
Report Date: 03/17/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2513286-01	045163-MW111R	WATER	SOMERVILLE, MA	03/07/25 14:15	03/10/25

Project Name: TUFTS STREET

Lab Number: L2513286

Project Number: 045163

Report Date: 03/17/25

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES
A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	NO
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	YES
For any questions answered "No", please refer to the case narrative section on the following page(s).		

Please note that sample matrix information is located in the Sample Results section of this report.



Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2513286
Report Date: 03/17/25

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Pace Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Pace's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Pace Project Manager and made arrangements for Pace to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2513286
Report Date: 03/17/25

Case Narrative (continued)

MCP Related Narratives

Volatile Organics

In reference to question H:

L2513286-01: Initial Calibration did not meet:

Lowest Calibration Standard Minimum Response Factor: 1,4-dioxane (0.0019)

Average Response Factor: 1,4-dioxane

Verification: dichlorodifluoromethane (136%)

L2513286-01: The associated continuing calibration standard is outside the acceptance criteria for three compounds; however, it is within overall method allowances. Associated results are considered to be biased high if the %D is negative and biased low if the %D is positive. A copy of the continuing calibration standard is included as an addendum to this report.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Kelly Stenstrom

Title: Technical Director/Representative

Date: 03/17/25

QC OUTLIER SUMMARY REPORT

Project Name: TUFTS STREET**Lab Number:** L2513286**Project Number:** 045163**Report Date:** 03/17/25

Method	Client ID (Native ID)	Lab ID	Parameter	QC Type	Recovery/RPD (%)	QC Limits (%)	Associated Samples	Data Quality Assessment
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There are no QC Outliers associated with this report.

ORGANICS

VOLATILES

Project Name: TUFTS STREET**Lab Number:** L2513286**Project Number:** 045163**Report Date:** 03/17/25**SAMPLE RESULTS**

Lab ID: L2513286-01
 Client ID: 045163-MW111R
 Sample Location: SOMERVILLE, MA

Date Collected: 03/07/25 14:15
 Date Received: 03/10/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water

Analytical Method: 141,8260D

Analytical Date: 03/13/25 12:13

Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	74		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2513286**Project Number:** 045163**Report Date:** 03/17/25**SAMPLE RESULTS**

Lab ID: L2513286-01
 Client ID: 045163-MW111R
 Sample Location: SOMERVILLE, MA

Date Collected: 03/07/25 14:15
 Date Received: 03/10/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	5.3		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	7.0		ug/l	1.0	--	1
1,2-Dichloroethene, Total	7.0		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	8.0		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2513286**Project Number:** 045163**Report Date:** 03/17/25**SAMPLE RESULTS**

Lab ID: L2513286-01
 Client ID: 045163-MW111R
 Sample Location: SOMERVILLE, MA

Date Collected: 03/07/25 14:15
 Date Received: 03/10/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	105		70-130

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2513286
Report Date: 03/17/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 141,8260D
 Analytical Date: 03/13/25 07:21
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01 Batch: WG2040411-5					
Methylene chloride	ND		ug/l	2.0	--
1,1-Dichloroethane	ND		ug/l	1.0	--
Chloroform	ND		ug/l	1.0	--
Carbon tetrachloride	ND		ug/l	1.0	--
1,2-Dichloropropane	ND		ug/l	1.0	--
Dibromochloromethane	ND		ug/l	1.0	--
1,1,2-Trichloroethane	ND		ug/l	1.0	--
Tetrachloroethene	ND		ug/l	1.0	--
Chlorobenzene	ND		ug/l	1.0	--
Trichlorofluoromethane	ND		ug/l	2.0	--
1,2-Dichloroethane	ND		ug/l	1.0	--
1,1,1-Trichloroethane	ND		ug/l	1.0	--
Bromodichloromethane	ND		ug/l	1.0	--
trans-1,3-Dichloropropene	ND		ug/l	0.40	--
cis-1,3-Dichloropropene	ND		ug/l	0.40	--
1,3-Dichloropropene, Total	ND		ug/l	0.40	--
1,1-Dichloropropene	ND		ug/l	2.0	--
Bromoform	ND		ug/l	2.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--
Benzene	ND		ug/l	0.50	--
Toluene	ND		ug/l	1.0	--
Ethylbenzene	ND		ug/l	1.0	--
Chloromethane	ND		ug/l	2.0	--
Bromomethane	ND		ug/l	2.0	--
Vinyl chloride	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	2.0	--
1,1-Dichloroethene	ND		ug/l	1.0	--
trans-1,2-Dichloroethene	ND		ug/l	1.0	--
Trichloroethene	ND		ug/l	1.0	--



Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2513286
Report Date: 03/17/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 141,8260D
 Analytical Date: 03/13/25 07:21
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01 Batch: WG2040411-5					
1,2-Dichlorobenzene	ND		ug/l	1.0	--
1,3-Dichlorobenzene	ND		ug/l	1.0	--
1,4-Dichlorobenzene	ND		ug/l	1.0	--
Methyl tert butyl ether	ND		ug/l	2.0	--
p/m-Xylene	ND		ug/l	2.0	--
o-Xylene	ND		ug/l	1.0	--
Xylenes, Total	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	1.0	--
1,2-Dichloroethene, Total	ND		ug/l	1.0	--
Dibromomethane	ND		ug/l	2.0	--
1,2,3-Trichloropropane	ND		ug/l	2.0	--
Styrene	ND		ug/l	1.0	--
Dichlorodifluoromethane	ND		ug/l	2.0	--
Acetone	ND		ug/l	5.0	--
Carbon disulfide	ND		ug/l	2.0	--
Methyl ethyl ketone	ND		ug/l	5.0	--
Methyl isobutyl ketone	ND		ug/l	5.0	--
2-Hexanone	ND		ug/l	5.0	--
Bromochloromethane	ND		ug/l	2.0	--
Tetrahydrofuran	ND		ug/l	2.0	--
2,2-Dichloropropane	ND		ug/l	2.0	--
1,2-Dibromoethane	ND		ug/l	2.0	--
1,3-Dichloropropane	ND		ug/l	2.0	--
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--
Bromobenzene	ND		ug/l	2.0	--
n-Butylbenzene	ND		ug/l	2.0	--
sec-Butylbenzene	ND		ug/l	2.0	--
tert-Butylbenzene	ND		ug/l	2.0	--
o-Chlorotoluene	ND		ug/l	2.0	--



Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2513286
Report Date: 03/17/25

Method Blank Analysis Batch Quality Control

Analytical Method: 141,8260D
Analytical Date: 03/13/25 07:21
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01 Batch: WG2040411-5					
p-Chlorotoluene	ND		ug/l	2.0	--
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--
Hexachlorobutadiene	ND		ug/l	0.60	--
Isopropylbenzene	ND		ug/l	2.0	--
p-Isopropyltoluene	ND		ug/l	2.0	--
Naphthalene	ND		ug/l	2.0	--
n-Propylbenzene	ND		ug/l	2.0	--
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--
Diethyl ether	ND		ug/l	2.0	--
Diisopropyl Ether	ND		ug/l	2.0	--
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--
1,4-Dioxane	ND		ug/l	250	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	107		70-130

Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2513286

Report Date: 03/17/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG2040411-3 WG2040411-4								
Methylene chloride	100		100		70-130	0		20
1,1-Dichloroethane	100		100		70-130	0		20
Chloroform	97		100		70-130	3		20
Carbon tetrachloride	100		110		70-130	10		20
1,2-Dichloropropane	100		100		70-130	0		20
Dibromochloromethane	93		93		70-130	0		20
1,1,2-Trichloroethane	97		99		70-130	2		20
Tetrachloroethene	97		97		70-130	0		20
Chlorobenzene	98		98		70-130	0		20
Trichlorofluoromethane	100		110		70-130	10		20
1,2-Dichloroethane	97		100		70-130	3		20
1,1,1-Trichloroethane	100		100		70-130	0		20
Bromodichloromethane	97		100		70-130	3		20
trans-1,3-Dichloropropene	93		95		70-130	2		20
cis-1,3-Dichloropropene	96		97		70-130	1		20
1,1-Dichloropropene	100		100		70-130	0		20
Bromoform	87		89		70-130	2		20
1,1,2,2-Tetrachloroethane	94		92		70-130	2		20
Benzene	99		100		70-130	1		20
Toluene	97		96		70-130	1		20
Ethylbenzene	96		96		70-130	0		20
Chloromethane	100		96		70-130	4		20
Bromomethane	75		76		70-130	1		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2513286

Report Date: 03/17/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG2040411-3 WG2040411-4								
Vinyl chloride	120		120		70-130	0		20
Chloroethane	120		130		70-130	8		20
1,1-Dichloroethene	100		100		70-130	0		20
trans-1,2-Dichloroethene	100		100		70-130	0		20
Trichloroethene	99		99		70-130	0		20
1,2-Dichlorobenzene	95		96		70-130	1		20
1,3-Dichlorobenzene	95		95		70-130	0		20
1,4-Dichlorobenzene	97		96		70-130	1		20
Methyl tert butyl ether	94		97		70-130	3		20
p/m-Xylene	95		95		70-130	0		20
o-Xylene	95		95		70-130	0		20
cis-1,2-Dichloroethene	100		100		70-130	0		20
Dibromomethane	99		100		70-130	1		20
1,2,3-Trichloropropane	91		88		70-130	3		20
Styrene	90		95		70-130	5		20
Dichlorodifluoromethane	130		130		70-130	0		20
Acetone	100		97		70-130	3		20
Carbon disulfide	100		110		70-130	10		20
Methyl ethyl ketone	88		92		70-130	4		20
Methyl isobutyl ketone	90		90		70-130	0		20
2-Hexanone	88		88		70-130	0		20
Bromochloromethane	100		110		70-130	10		20
Tetrahydrofuran	98		92		70-130	6		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2513286

Report Date: 03/17/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG2040411-3 WG2040411-4								
2,2-Dichloropropane	100		96		70-130	4		20
1,2-Dibromoethane	96		97		70-130	1		20
1,3-Dichloropropane	94		95		70-130	1		20
1,1,1,2-Tetrachloroethane	92		93		70-130	1		20
Bromobenzene	96		95		70-130	1		20
n-Butylbenzene	98		96		70-130	2		20
sec-Butylbenzene	97		95		70-130	2		20
tert-Butylbenzene	96		94		70-130	2		20
o-Chlorotoluene	94		94		70-130	0		20
p-Chlorotoluene	96		94		70-130	2		20
1,2-Dibromo-3-chloropropane	87		91		70-130	4		20
Hexachlorobutadiene	93		92		70-130	1		20
Isopropylbenzene	95		94		70-130	1		20
p-Isopropyltoluene	97		95		70-130	2		20
Naphthalene	94		93		70-130	1		20
n-Propylbenzene	96		94		70-130	2		20
1,2,3-Trichlorobenzene	95		95		70-130	0		20
1,2,4-Trichlorobenzene	95		94		70-130	1		20
1,3,5-Trimethylbenzene	96		95		70-130	1		20
1,2,4-Trimethylbenzene	95		94		70-130	1		20
Diethyl ether	100		99		70-130	1		20
Diisopropyl Ether	96		96		70-130	0		20
Ethyl-Tert-Butyl-Ether	90		92		70-130	2		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2513286

Report Date: 03/17/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG2040411-3 WG2040411-4								
Tertiary-Amyl Methyl Ether	91		94		70-130	3		20
1,4-Dioxane	86		88		70-130	2		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	98		98		70-130
Toluene-d8	100		100		70-130
4-Bromofluorobenzene	98		95		70-130
Dibromofluoromethane	104		103		70-130

Project Name: TUFTS STREET
Project Number: 045163

Serial_No:03172519:30
Lab Number: L2513286
Report Date: 03/17/25

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2513286-01A	Vial HCl preserved	A	NA		3.9	Y	Absent		MCP-8260-21(14)
L2513286-01B	Vial HCl preserved	A	NA		3.9	Y	Absent		MCP-8260-21(14)
L2513286-01C	Vial HCl preserved	A	NA		3.9	Y	Absent		MCP-8260-21(14)

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2513286
Report Date: 03/17/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
	Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report



Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2513286
Report Date: 03/17/25

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

Report Format: Data Usability Report



Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2513286
Report Date: 03/17/25

Data Qualifiers

- ND** - Not detected at the reporting limit (RL) for the sample.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2513286
Report Date: 03/17/25

REFERENCES

- 141 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA and IIB, November 2021.

LIMITATION OF LIABILITIES

Pace Analytical Services performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Pace Analytical Services shall be to re-perform the work at it's own expense. In no event shall Pace Analytical Services be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Pace Analytical Services.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Pace Analytical Services LLCFacility: **Northeast**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

Revision 27

Published Date: 01/24/2025

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Certification Information**The following analytes are not included in our Primary NELAP Scope of Accreditation:****Westborough Facility – 8 Walkup Dr. Westborough, MA 01581****EPA 624.1:** m/p-xylene, o-xylene, Naphthalene**EPA 625.1:** alpha-Terpineol**EPA 8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****SM 2540D:** TSS.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

MADEP-APH.**Nonpotable Water:** EPA RSK-175 Dissolved Gases**Biological Tissue Matrix:** EPA 3050B**Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048****EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Nonpotable Water: EPA RSK-175 Dissolved Gases**The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:****Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)****The following analytes are included in our Massachusetts DEP Scope of Accreditation****Westborough Facility – 8 Walkup Dr. Westborough, MA 01581****Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables).**Microbiology:** SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg. EPA 522, EPA 537.1.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1 Hg.****SM2340B**

Pace Analytical Services LLCID No.: **17873**Facility: **Northeast**

Revision 27

Department: **Quality Assurance**

Published Date: 01/24/2025

Title: **Certificate/Approval Program Summary**

Page 2 of 2

Certification IDs:**Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**

CT PH-0826, IL 200077, IN C-MA-03, KY JY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 3090, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048

ANAB/DoD L2474, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

For a complete listing of analytes and methods, please contact your Project Manager.

Page 26 of 30

Method Blank Summary Form 4 Volatiles

Client : GEI Consultants
Project Name : TUFTS STREET
Lab Sample ID : WG2040411-5
Instrument ID : JACK
Matrix : WATER

Lab Number : L2513286
Project Number : 045163
Lab File ID : J250313A05
Analysis Date : 03/13/25 07:21

Client Sample No.	Lab Sample ID	Analysis Date
WG2040411-3LCS	WG2040411-3	03/13/25 06:02
WG2040411-4LCSD	WG2040411-4	03/13/25 06:28
045163-MW111R	L2513286-01	03/13/25 12:13

Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : TUFTS STREET
 Instrument ID : JACK
 Lab File ID : J250313A02
 Sample No : WG2040411-2
 Channel :

Lab Number : L2513286
 Project Number : 045163
 Calibration Date : 03/13/25 06:02
 Init. Calib. Date(s) : 02/28/25 02/28/25
 Init. Calib. Times : 05:35 08:42

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	89	0
Dichlorodifluoromethane	0.28	0.356	-	-27.1*	20	110	0
Chloromethane	0.294	0.296	-	-0.7	20	89	0
Vinyl chloride	0.352	0.418	-	-18.8	20	102	0
Bromomethane	0.178	0.134	-	24.7*	20	69	0
Chloroethane	0.189	0.236	-	-24.9*	20	108	0
Trichlorofluoromethane	0.411	0.435	-	-5.8	20	91	0
Ethyl ether	0.116	0.119	-	-2.6	20	89	0
1,1-Dichloroethene	0.228	0.237	-	-3.9	20	92	0
Carbon disulfide	0.7	0.735	-	-5	20	93	0
Freon-113	0.246	0.262	-	-6.5	20	94	0
Acrolein	0.041	0.038	-	7.3	20	88	0
Methylene chloride	0.247	0.25	-	-1.2	20	91	0
Acetone	0.077	0.077	-	0	20	93	0
trans-1,2-Dichloroethene	0.247	0.256	-	-3.6	20	90	0
Methyl acetate	0.167	0.149	-	10.8	20	82	0
Methyl tert-butyl ether	0.682	0.638	-	6.5	20	83	0
tert-Butyl alcohol	0.026	0.023	-	11.5	20	68	0
Diisopropyl ether	0.875	0.837	-	4.3	20	86	0
1,1-Dichloroethane	0.492	0.496	-	-0.8	20	89	0
Halothane	0.201	0.204	-	-1.5	20	89	0
Acrylonitrile	0.082	0.081	-	1.2	20	87	0
Ethyl tert-butyl ether	0.785	0.709	-	9.7	20	81	0
Vinyl acetate	0.688	0.628	-	8.7	20	83	0
cis-1,2-Dichloroethene	0.272	0.276	-	-1.5	20	90	0
2,2-Dichloropropane	0.423	0.435	-	-2.8	20	93	0
Bromochloromethane	0.122	0.127	-	-4.1	20	89	0
Cyclohexane	0.51	0.507	-	0.6	20	89	0
Chloroform	0.462	0.449	-	2.8	20	88	0
Ethyl acetate	0.269	0.241	-	10.4	20	79	0
Carbon tetrachloride	0.363	0.372	-	-2.5	20	89	0
Tetrahydrofuran	0.095	0.093	-	2.1	20	84	0
Dibromofluoromethane	0.264	0.276	-	-4.5	20	92	0
1,1,1-Trichloroethane	0.408	0.42	-	-2.9	20	91	0
2-Butanone	0.121	0.106	-	12.4	20	80	0
1,1-Dichloropropene	0.335	0.339	-	-1.2	20	88	0
Benzene	1.011	0.999	-	1.2	20	89	0
tert-Amyl methyl ether	0.688	0.626	-	9	20	80	0
1,2-Dichloroethane-d4	0.324	0.318	-	1.9	20	88	0
1,2-Dichloroethane	0.355	0.344	-	3.1	20	86	0
Methyl cyclohexane	0.47	0.466	-	0.9	20	91	0
Trichloroethene	0.271	0.269	-	0.7	20	87	0
Dibromomethane	0.153	0.152	-	0.7	20	85	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : TUFTS STREET
 Instrument ID : JACK
 Lab File ID : J250313A02
 Sample No : WG2040411-2
 Channel :

Lab Number : L2513286
 Project Number : 045163
 Calibration Date : 03/13/25 06:02
 Init. Calib. Date(s) : 02/28/25 02/28/25
 Init. Calib. Times : 05:35 08:42

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,2-Dichloropropane	0.262	0.274	-	-4.6	20	87	0
2-Chloroethyl vinyl ether	0.159	0.128	-	19.5	20	67	0
Bromodichloromethane	0.344	0.334	-	2.9	20	83	0
1,4-Dioxane	0.00217	0.00185*	-	14.7	20	77	0
cis-1,3-Dichloropropene	0.409	0.393	-	3.9	20	81	0
Chlorobenzene-d5	1	1	-	0	20	89	0
Toluene-d8	1.318	1.322	-	-0.3	20	90	0
Toluene	0.882	0.859	-	2.6	20	87	0
4-Methyl-2-pentanone	0.125	0.113	-	9.6	20	77	0
Tetrachloroethene	0.411	0.397	-	3.4	20	86	0
trans-1,3-Dichloropropene	0.495	0.461	-	6.9	20	79	0
Ethyl methacrylate	0.424	0.382	-	9.9	20	76	0
1,1,2-Trichloroethane	0.262	0.253	-	3.4	20	80	0
Chlorodibromomethane	0.365	0.341	-	6.6	20	79	0
1,3-Dichloropropane	0.486	0.455	-	6.4	20	80	0
1,2-Dibromoethane	0.295	0.282	-	4.4	20	80	0
2-Hexanone	0.255	0.224	-	12.2	20	73	0
Chlorobenzene	0.973	0.957	-	1.6	20	84	0
Ethylbenzene	1.752	1.69	-	3.5	20	85	0
1,1,1,2-Tetrachloroethane	0.357	0.329	-	7.8	20	79	0
p/m Xylene	0.685	0.663	-	3.2	20	86	0
o Xylene	0.658	0.64	-	2.7	20	86	0
Styrene	1.121	1.038	-	7.4	20	81	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	90	0
Bromoform	0.441	0.385	-	12.7	20	72	0
Isopropylbenzene	3.009	2.873	-	4.5	20	83	0
4-Bromofluorobenzene	0.855	0.84	-	1.8	20	89	0
Bromobenzene	0.72	0.694	-	3.6	20	81	0
n-Propylbenzene	3.645	3.508	-	3.8	20	84	0
1,4-Dichlorobutane	0.953	0.841	-	11.8	20	77	0
1,1,2,2-Tetrachloroethane	0.7	0.66	-	5.7	20	77	0
4-Ethyltoluene	2.97	2.894	-	2.6	20	85	0
2-Chlorotoluene	2.404	2.268	-	5.7	20	83	0
1,3,5-Trimethylbenzene	2.587	2.475	-	4.3	20	85	0
1,2,3-Trichloropropane	0.56	0.51	-	8.9	20	76	0
trans-1,4-Dichloro-2-buten	0.238	0.206	-	13.4	20	71	0
4-Chlorotoluene	2.179	2.096	-	3.8	20	83	0
tert-Butylbenzene	2.151	2.067	-	3.9	20	85	0
1,2,4-Trimethylbenzene	2.516	2.398	-	4.7	20	83	0
sec-Butylbenzene	3.283	3.197	-	2.6	20	86	0
p-Isopropyltoluene	2.792	2.71	-	2.9	20	85	0
1,3-Dichlorobenzene	1.47	1.396	-	5	20	82	0
1,4-Dichlorobenzene	1.47	1.421	-	3.3	20	83	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : TUFTS STREET
 Instrument ID : JACK
 Lab File ID : J250313A02
 Sample No : WG2040411-2
 Channel :

Lab Number : L2513286
 Project Number : 045163
 Calibration Date : 03/13/25 06:02
 Init. Calib. Date(s) : 02/28/25 02/28/25
 Init. Calib. Times : 05:35 08:42

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
p-Diethylbenzene	1.637	1.592	-	2.7	20	85	0
n-Butylbenzene	2.502	2.461	-	1.6	20	88	0
1,2-Dichlorobenzene	1.362	1.295	-	4.9	20	81	0
1,2,4,5-Tetramethylbenzene	2.513	2.315	-	7.9	20	82	0
1,2-Dibromo-3-chloropropan	0.133	0.116	-	12.8	20	75	0
1,3,5-Trichlorobenzene	1.072	1.026	-	4.3	20	84	0
Hexachlorobutadiene	0.458	0.428	-	6.6	20	86	0
1,2,4-Trichlorobenzene	0.948	0.905	-	4.5	20	85	0
Naphthalene	2.388	2.251	-	5.7	20	82	0
1,2,3-Trichlorobenzene	0.868	0.824	-	5.1	20	83	0

* Value outside of QC limits.



ANALYTICAL REPORT

Lab Number:	L2516183
Client:	GEI Consultants 400 Unicorn Park Drive Woburn, MA 01801
ATTN:	Chris Coner
Phone:	(781) 721-4000
Project Name:	TUFTS STREET
Project Number:	045163
Report Date:	03/27/25

The original project report/data package is held by Pace Analytical Services. This report/data package is paginated and should be reproduced only in its entirety. Pace Analytical Services holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2516183
Report Date: 03/27/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2516183-01	045163-GEO-4	WATER	SOMERVILLE, MA	03/18/25 13:00	03/20/25
L2516183-02	045163-GEO-5	WATER	SOMERVILLE, MA	03/18/25 14:45	03/20/25
L2516183-03	045163-GEO-6	WATER	SOMERVILLE, MA	03/19/25 10:25	03/20/25
L2516183-04	045163-MW106	WATER	SOMERVILLE, MA	03/19/25 12:05	03/20/25
L2516183-05	045163-MW109	WATER	SOMERVILLE, MA	03/19/25 12:30	03/20/25

Project Name: TUFTS STREET

Lab Number: L2516183

Project Number: 045163

Report Date: 03/27/25

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES
A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	NO
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	NO
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	YES
For any questions answered "No", please refer to the case narrative section on the following page(s).		

Please note that sample matrix information is located in the Sample Results section of this report.



Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2516183
Report Date: 03/27/25

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Pace Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Pace's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Pace Project Manager and made arrangements for Pace to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2516183
Report Date: 03/27/25

Case Narrative (continued)

MCP Related Narratives

Volatile Organics

L2516183-03D: A copy of the continuing calibration standard is included as an addendum to this report.

In reference to question G:

L2516183-01D, -02D, and -03D: One or more of the target analytes did not achieve the requested CAM reporting limits.

In reference to question H:

L2516183-01D, -02D, -04, and -05: Initial Calibration did not meet:

Lowest Calibration Standard Minimum Response Factor: 1,4-dioxane (0.0019)

Average Response Factor: 1,4-dioxane

Verification: dichlorodifluoromethane (136%)

L2516183-03D: Initial Calibration did not meet:

Lowest Calibration Standard Minimum Response Factor: bromodichloromethane (0.2427), 1,4-dioxane (0.0016)

Average Response Factor: bromodichloromethane, 1,4-dioxane

L2516183-01D, -02D, -04, and -05: The associated continuing calibration standard is outside the acceptance criteria for several compounds; however, it is within overall method allowances. Associated results are considered to be biased high if the %D is negative and biased low if the %D is positive. A copy of the continuing calibration standard is included as an addendum to this report.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:



Kelly O'Neill

Title: Technical Director/Representative

Date: 03/27/25

QC OUTLIER SUMMARY REPORT

Project Name: TUFTS STREET**Lab Number:** L2516183**Project Number:** 045163**Report Date:** 03/27/25

Method	Client ID (Native ID)	Lab ID	Parameter	QC Type	Recovery/RPD (%)	QC Limits (%)	Associated Samples	Data Quality Assessment
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There are no QC Outliers associated with this report.

ORGANICS

VOLATILES

Project Name: TUFTS STREET**Lab Number:** L2516183**Project Number:** 045163**Report Date:** 03/27/25**SAMPLE RESULTS**

Lab ID: L2516183-01 D

Date Collected: 03/18/25 13:00

Client ID: 045163-GEO-4

Date Received: 03/20/25

Sample Location: SOMERVILLE, MA

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Analytical Method: 141,8260D

Analytical Date: 03/26/25 13:17

Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	80	--	40
1,1-Dichloroethane	ND		ug/l	40	--	40
Chloroform	ND		ug/l	40	--	40
Carbon tetrachloride	ND		ug/l	40	--	40
1,2-Dichloropropane	ND		ug/l	40	--	40
Dibromochloromethane	ND		ug/l	40	--	40
1,1,2-Trichloroethane	ND		ug/l	40	--	40
Tetrachloroethene	6500		ug/l	40	--	40
Chlorobenzene	ND		ug/l	40	--	40
Trichlorofluoromethane	ND		ug/l	80	--	40
1,2-Dichloroethane	ND		ug/l	40	--	40
1,1,1-Trichloroethane	ND		ug/l	40	--	40
Bromodichloromethane	ND		ug/l	40	--	40
trans-1,3-Dichloropropene	ND		ug/l	16	--	40
cis-1,3-Dichloropropene	ND		ug/l	16	--	40
1,3-Dichloropropene, Total	ND		ug/l	16	--	40
1,1-Dichloropropene	ND		ug/l	80	--	40
Bromoform	ND		ug/l	80	--	40
1,1,2,2-Tetrachloroethane	ND		ug/l	40	--	40
Benzene	ND		ug/l	20	--	40
Toluene	ND		ug/l	40	--	40
Ethylbenzene	ND		ug/l	40	--	40
Chloromethane	ND		ug/l	80	--	40
Bromomethane	ND		ug/l	80	--	40
Vinyl chloride	ND		ug/l	40	--	40
Chloroethane	ND		ug/l	80	--	40
1,1-Dichloroethene	ND		ug/l	40	--	40
trans-1,2-Dichloroethene	ND		ug/l	40	--	40

Project Name: TUFTS STREET**Lab Number:** L2516183**Project Number:** 045163**Report Date:** 03/27/25**SAMPLE RESULTS**

Lab ID: L2516183-01 D

Date Collected: 03/18/25 13:00

Client ID: 045163-GEO-4

Date Received: 03/20/25

Sample Location: SOMERVILLE, MA

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	47		ug/l	40	--	40
1,2-Dichlorobenzene	ND		ug/l	40	--	40
1,3-Dichlorobenzene	ND		ug/l	40	--	40
1,4-Dichlorobenzene	ND		ug/l	40	--	40
Methyl tert butyl ether	ND		ug/l	80	--	40
p/m-Xylene	ND		ug/l	80	--	40
o-Xylene	ND		ug/l	40	--	40
Xylenes, Total	ND		ug/l	40	--	40
cis-1,2-Dichloroethene	ND		ug/l	40	--	40
1,2-Dichloroethene, Total	ND		ug/l	40	--	40
Dibromomethane	ND		ug/l	80	--	40
1,2,3-Trichloropropane	ND		ug/l	80	--	40
Styrene	ND		ug/l	40	--	40
Dichlorodifluoromethane	ND		ug/l	80	--	40
Acetone	ND		ug/l	200	--	40
Carbon disulfide	ND		ug/l	80	--	40
Methyl ethyl ketone	ND		ug/l	200	--	40
Methyl isobutyl ketone	ND		ug/l	200	--	40
2-Hexanone	ND		ug/l	200	--	40
Bromochloromethane	ND		ug/l	80	--	40
Tetrahydrofuran	ND		ug/l	80	--	40
2,2-Dichloropropane	ND		ug/l	80	--	40
1,2-Dibromoethane	ND		ug/l	80	--	40
1,3-Dichloropropane	ND		ug/l	80	--	40
1,1,1,2-Tetrachloroethane	ND		ug/l	40	--	40
Bromobenzene	ND		ug/l	80	--	40
n-Butylbenzene	ND		ug/l	80	--	40
sec-Butylbenzene	ND		ug/l	80	--	40
tert-Butylbenzene	ND		ug/l	80	--	40
o-Chlorotoluene	ND		ug/l	80	--	40
p-Chlorotoluene	ND		ug/l	80	--	40
1,2-Dibromo-3-chloropropane	ND		ug/l	80	--	40
Hexachlorobutadiene	ND		ug/l	24	--	40
Isopropylbenzene	ND		ug/l	80	--	40
p-Isopropyltoluene	ND		ug/l	80	--	40
Naphthalene	ND		ug/l	80	--	40
n-Propylbenzene	ND		ug/l	80	--	40



Project Name: TUFTS STREET**Lab Number:** L2516183**Project Number:** 045163**Report Date:** 03/27/25**SAMPLE RESULTS**

Lab ID: L2516183-01 D

Date Collected: 03/18/25 13:00

Client ID: 045163-GEO-4

Date Received: 03/20/25

Sample Location: SOMERVILLE, MA

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	80	--	40
1,2,4-Trichlorobenzene	ND		ug/l	80	--	40
1,3,5-Trimethylbenzene	ND		ug/l	80	--	40
1,2,4-Trimethylbenzene	ND		ug/l	80	--	40
Diethyl ether	ND		ug/l	80	--	40
Diisopropyl Ether	ND		ug/l	80	--	40
Ethyl-Tert-Butyl-Ether	ND		ug/l	80	--	40
Tertiary-Amyl Methyl Ether	ND		ug/l	80	--	40
1,4-Dioxane	ND		ug/l	10000	--	40

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	105		70-130

Project Name: TUFTS STREET**Lab Number:** L2516183**Project Number:** 045163**Report Date:** 03/27/25**SAMPLE RESULTS**

Lab ID: L2516183-02 D

Date Collected: 03/18/25 14:45

Client ID: 045163-GEO-5

Date Received: 03/20/25

Sample Location: SOMERVILLE, MA

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Analytical Method: 141,8260D

Analytical Date: 03/26/25 12:51

Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	10	--	5
1,1-Dichloroethane	ND		ug/l	5.0	--	5
Chloroform	ND		ug/l	5.0	--	5
Carbon tetrachloride	ND		ug/l	5.0	--	5
1,2-Dichloropropane	ND		ug/l	5.0	--	5
Dibromochloromethane	ND		ug/l	5.0	--	5
1,1,2-Trichloroethane	ND		ug/l	5.0	--	5
Tetrachloroethene	690		ug/l	5.0	--	5
Chlorobenzene	ND		ug/l	5.0	--	5
Trichlorofluoromethane	ND		ug/l	10	--	5
1,2-Dichloroethane	ND		ug/l	5.0	--	5
1,1,1-Trichloroethane	ND		ug/l	5.0	--	5
Bromodichloromethane	ND		ug/l	5.0	--	5
trans-1,3-Dichloropropene	ND		ug/l	2.0	--	5
cis-1,3-Dichloropropene	ND		ug/l	2.0	--	5
1,3-Dichloropropene, Total	ND		ug/l	2.0	--	5
1,1-Dichloropropene	ND		ug/l	10	--	5
Bromoform	ND		ug/l	10	--	5
1,1,2,2-Tetrachloroethane	ND		ug/l	5.0	--	5
Benzene	ND		ug/l	2.5	--	5
Toluene	ND		ug/l	5.0	--	5
Ethylbenzene	ND		ug/l	5.0	--	5
Chloromethane	ND		ug/l	10	--	5
Bromomethane	ND		ug/l	10	--	5
Vinyl chloride	ND		ug/l	5.0	--	5
Chloroethane	ND		ug/l	10	--	5
1,1-Dichloroethene	ND		ug/l	5.0	--	5
trans-1,2-Dichloroethene	ND		ug/l	5.0	--	5



Project Name: TUFTS STREET**Lab Number:** L2516183**Project Number:** 045163**Report Date:** 03/27/25**SAMPLE RESULTS**

Lab ID: L2516183-02 D

Date Collected: 03/18/25 14:45

Client ID: 045163-GEO-5

Date Received: 03/20/25

Sample Location: SOMERVILLE, MA

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	10		ug/l	5.0	--	5
1,2-Dichlorobenzene	ND		ug/l	5.0	--	5
1,3-Dichlorobenzene	ND		ug/l	5.0	--	5
1,4-Dichlorobenzene	ND		ug/l	5.0	--	5
Methyl tert butyl ether	ND		ug/l	10	--	5
p/m-Xylene	ND		ug/l	10	--	5
o-Xylene	ND		ug/l	5.0	--	5
Xylenes, Total	ND		ug/l	5.0	--	5
cis-1,2-Dichloroethene	ND		ug/l	5.0	--	5
1,2-Dichloroethene, Total	ND		ug/l	5.0	--	5
Dibromomethane	ND		ug/l	10	--	5
1,2,3-Trichloropropane	ND		ug/l	10	--	5
Styrene	ND		ug/l	5.0	--	5
Dichlorodifluoromethane	ND		ug/l	10	--	5
Acetone	ND		ug/l	25	--	5
Carbon disulfide	ND		ug/l	10	--	5
Methyl ethyl ketone	ND		ug/l	25	--	5
Methyl isobutyl ketone	ND		ug/l	25	--	5
2-Hexanone	ND		ug/l	25	--	5
Bromochloromethane	ND		ug/l	10	--	5
Tetrahydrofuran	ND		ug/l	10	--	5
2,2-Dichloropropane	ND		ug/l	10	--	5
1,2-Dibromoethane	ND		ug/l	10	--	5
1,3-Dichloropropane	ND		ug/l	10	--	5
1,1,1,2-Tetrachloroethane	ND		ug/l	5.0	--	5
Bromobenzene	ND		ug/l	10	--	5
n-Butylbenzene	ND		ug/l	10	--	5
sec-Butylbenzene	ND		ug/l	10	--	5
tert-Butylbenzene	ND		ug/l	10	--	5
o-Chlorotoluene	ND		ug/l	10	--	5
p-Chlorotoluene	ND		ug/l	10	--	5
1,2-Dibromo-3-chloropropane	ND		ug/l	10	--	5
Hexachlorobutadiene	ND		ug/l	3.0	--	5
Isopropylbenzene	ND		ug/l	10	--	5
p-Isopropyltoluene	ND		ug/l	10	--	5
Naphthalene	ND		ug/l	10	--	5
n-Propylbenzene	ND		ug/l	10	--	5



Project Name: TUFTS STREET**Lab Number:** L2516183**Project Number:** 045163**Report Date:** 03/27/25**SAMPLE RESULTS**

Lab ID: L2516183-02 D

Date Collected: 03/18/25 14:45

Client ID: 045163-GEO-5

Date Received: 03/20/25

Sample Location: SOMERVILLE, MA

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	10	--	5
1,2,4-Trichlorobenzene	ND		ug/l	10	--	5
1,3,5-Trimethylbenzene	ND		ug/l	10	--	5
1,2,4-Trimethylbenzene	ND		ug/l	10	--	5
Diethyl ether	ND		ug/l	10	--	5
Diisopropyl Ether	ND		ug/l	10	--	5
Ethyl-Tert-Butyl-Ether	ND		ug/l	10	--	5
Tertiary-Amyl Methyl Ether	ND		ug/l	10	--	5
1,4-Dioxane	ND		ug/l	1200	--	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	105		70-130

Project Name: TUFTS STREET**Lab Number:** L2516183**Project Number:** 045163**Report Date:** 03/27/25**SAMPLE RESULTS**

Lab ID: L2516183-03 D

Date Collected: 03/19/25 10:25

Client ID: 045163-GEO-6

Date Received: 03/20/25

Sample Location: SOMERVILLE, MA

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Analytical Method: 141,8260D

Analytical Date: 03/27/25 08:06

Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	20	--	10
1,1-Dichloroethane	ND		ug/l	10	--	10
Chloroform	ND		ug/l	10	--	10
Carbon tetrachloride	ND		ug/l	10	--	10
1,2-Dichloropropane	ND		ug/l	10	--	10
Dibromochloromethane	ND		ug/l	10	--	10
1,1,2-Trichloroethane	ND		ug/l	10	--	10
Tetrachloroethene	1300		ug/l	10	--	10
Chlorobenzene	ND		ug/l	10	--	10
Trichlorofluoromethane	ND		ug/l	20	--	10
1,2-Dichloroethane	ND		ug/l	10	--	10
1,1,1-Trichloroethane	ND		ug/l	10	--	10
Bromodichloromethane	ND		ug/l	10	--	10
trans-1,3-Dichloropropene	ND		ug/l	4.0	--	10
cis-1,3-Dichloropropene	ND		ug/l	4.0	--	10
1,3-Dichloropropene, Total	ND		ug/l	4.0	--	10
1,1-Dichloropropene	ND		ug/l	20	--	10
Bromoform	ND		ug/l	20	--	10
1,1,2,2-Tetrachloroethane	ND		ug/l	10	--	10
Benzene	ND		ug/l	5.0	--	10
Toluene	ND		ug/l	10	--	10
Ethylbenzene	ND		ug/l	10	--	10
Chloromethane	ND		ug/l	20	--	10
Bromomethane	ND		ug/l	20	--	10
Vinyl chloride	ND		ug/l	10	--	10
Chloroethane	ND		ug/l	20	--	10
1,1-Dichloroethene	ND		ug/l	10	--	10
trans-1,2-Dichloroethene	ND		ug/l	10	--	10



Project Name: TUFTS STREET**Lab Number:** L2516183**Project Number:** 045163**Report Date:** 03/27/25**SAMPLE RESULTS**

Lab ID: L2516183-03 D

Date Collected: 03/19/25 10:25

Client ID: 045163-GEO-6

Date Received: 03/20/25

Sample Location: SOMERVILLE, MA

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	35		ug/l	10	--	10
1,2-Dichlorobenzene	ND		ug/l	10	--	10
1,3-Dichlorobenzene	ND		ug/l	10	--	10
1,4-Dichlorobenzene	ND		ug/l	10	--	10
Methyl tert butyl ether	ND		ug/l	20	--	10
p/m-Xylene	ND		ug/l	20	--	10
o-Xylene	ND		ug/l	10	--	10
Xylenes, Total	ND		ug/l	10	--	10
cis-1,2-Dichloroethene	ND		ug/l	10	--	10
1,2-Dichloroethene, Total	ND		ug/l	10	--	10
Dibromomethane	ND		ug/l	20	--	10
1,2,3-Trichloropropane	ND		ug/l	20	--	10
Styrene	ND		ug/l	10	--	10
Dichlorodifluoromethane	ND		ug/l	20	--	10
Acetone	ND		ug/l	50	--	10
Carbon disulfide	ND		ug/l	20	--	10
Methyl ethyl ketone	ND		ug/l	50	--	10
Methyl isobutyl ketone	ND		ug/l	50	--	10
2-Hexanone	ND		ug/l	50	--	10
Bromochloromethane	ND		ug/l	20	--	10
Tetrahydrofuran	ND		ug/l	20	--	10
2,2-Dichloropropane	ND		ug/l	20	--	10
1,2-Dibromoethane	ND		ug/l	20	--	10
1,3-Dichloropropane	ND		ug/l	20	--	10
1,1,1,2-Tetrachloroethane	ND		ug/l	10	--	10
Bromobenzene	ND		ug/l	20	--	10
n-Butylbenzene	ND		ug/l	20	--	10
sec-Butylbenzene	ND		ug/l	20	--	10
tert-Butylbenzene	ND		ug/l	20	--	10
o-Chlorotoluene	ND		ug/l	20	--	10
p-Chlorotoluene	ND		ug/l	20	--	10
1,2-Dibromo-3-chloropropane	ND		ug/l	20	--	10
Hexachlorobutadiene	ND		ug/l	6.0	--	10
Isopropylbenzene	ND		ug/l	20	--	10
p-Isopropyltoluene	ND		ug/l	20	--	10
Naphthalene	ND		ug/l	20	--	10
n-Propylbenzene	ND		ug/l	20	--	10



Project Name: TUFTS STREET**Lab Number:** L2516183**Project Number:** 045163**Report Date:** 03/27/25**SAMPLE RESULTS**

Lab ID: L2516183-03 D

Date Collected: 03/19/25 10:25

Client ID: 045163-GEO-6

Date Received: 03/20/25

Sample Location: SOMERVILLE, MA

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	20	--	10
1,2,4-Trichlorobenzene	ND		ug/l	20	--	10
1,3,5-Trimethylbenzene	ND		ug/l	20	--	10
1,2,4-Trimethylbenzene	ND		ug/l	20	--	10
Diethyl ether	ND		ug/l	20	--	10
Ethyl-Tert-Butyl-Ether	ND		ug/l	20	--	10
Tertiary-Amyl Methyl Ether	ND		ug/l	20	--	10
1,4-Dioxane	ND		ug/l	2500	--	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	100		70-130

Project Name: TUFTS STREET**Lab Number:** L2516183**Project Number:** 045163**Report Date:** 03/27/25**SAMPLE RESULTS**

Lab ID: L2516183-04
 Client ID: 045163-MW106
 Sample Location: SOMERVILLE, MA

Date Collected: 03/19/25 12:05
 Date Received: 03/20/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 141,8260D
 Analytical Date: 03/26/25 11:04
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	3.5		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	1.3		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2516183**Project Number:** 045163**Report Date:** 03/27/25**SAMPLE RESULTS**

Lab ID: L2516183-04
 Client ID: 045163-MW106
 Sample Location: SOMERVILLE, MA

Date Collected: 03/19/25 12:05
 Date Received: 03/20/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	2.3		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2516183**Project Number:** 045163**Report Date:** 03/27/25**SAMPLE RESULTS**

Lab ID: L2516183-04
 Client ID: 045163-MW106
 Sample Location: SOMERVILLE, MA

Date Collected: 03/19/25 12:05
 Date Received: 03/20/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	113		70-130

Project Name: TUFTS STREET**Lab Number:** L2516183**Project Number:** 045163**Report Date:** 03/27/25**SAMPLE RESULTS**

Lab ID: L2516183-05
 Client ID: 045163-MW109
 Sample Location: SOMERVILLE, MA

Date Collected: 03/19/25 12:30
 Date Received: 03/20/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 141,8260D
 Analytical Date: 03/26/25 10:37
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	4.8		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2516183**Project Number:** 045163**Report Date:** 03/27/25**SAMPLE RESULTS**

Lab ID: L2516183-05
 Client ID: 045163-MW109
 Sample Location: SOMERVILLE, MA

Date Collected: 03/19/25 12:30
 Date Received: 03/20/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2516183**Project Number:** 045163**Report Date:** 03/27/25**SAMPLE RESULTS**

Lab ID: L2516183-05
 Client ID: 045163-MW109
 Sample Location: SOMERVILLE, MA

Date Collected: 03/19/25 12:30
 Date Received: 03/20/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	114		70-130

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2516183
Report Date: 03/27/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 141,8260D
 Analytical Date: 03/26/25 05:59
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-02,04-05 Batch: WG2045405-5					
Methylene chloride	ND		ug/l	2.0	--
1,1-Dichloroethane	ND		ug/l	1.0	--
Chloroform	ND		ug/l	1.0	--
Carbon tetrachloride	ND		ug/l	1.0	--
1,2-Dichloropropane	ND		ug/l	1.0	--
Dibromochloromethane	ND		ug/l	1.0	--
1,1,2-Trichloroethane	ND		ug/l	1.0	--
Tetrachloroethene	ND		ug/l	1.0	--
Chlorobenzene	ND		ug/l	1.0	--
Trichlorofluoromethane	ND		ug/l	2.0	--
1,2-Dichloroethane	ND		ug/l	1.0	--
1,1,1-Trichloroethane	ND		ug/l	1.0	--
Bromodichloromethane	ND		ug/l	1.0	--
trans-1,3-Dichloropropene	ND		ug/l	0.40	--
cis-1,3-Dichloropropene	ND		ug/l	0.40	--
1,3-Dichloropropene, Total	ND		ug/l	0.40	--
1,1-Dichloropropene	ND		ug/l	2.0	--
Bromoform	ND		ug/l	2.0	--
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--
Benzene	ND		ug/l	0.50	--
Toluene	ND		ug/l	1.0	--
Ethylbenzene	ND		ug/l	1.0	--
Chloromethane	ND		ug/l	2.0	--
Bromomethane	ND		ug/l	2.0	--
Vinyl chloride	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	2.0	--
1,1-Dichloroethene	ND		ug/l	1.0	--
trans-1,2-Dichloroethene	ND		ug/l	1.0	--
Trichloroethene	ND		ug/l	1.0	--



Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2516183
Report Date: 03/27/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 141,8260D
Analytical Date: 03/26/25 05:59
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-02,04-05 Batch: WG2045405-5					
1,2-Dichlorobenzene	ND		ug/l	1.0	--
1,3-Dichlorobenzene	ND		ug/l	1.0	--
1,4-Dichlorobenzene	ND		ug/l	1.0	--
Methyl tert butyl ether	ND		ug/l	2.0	--
p/m-Xylene	ND		ug/l	2.0	--
o-Xylene	ND		ug/l	1.0	--
Xylenes, Total	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	1.0	--
1,2-Dichloroethene, Total	ND		ug/l	1.0	--
Dibromomethane	ND		ug/l	2.0	--
1,2,3-Trichloropropane	ND		ug/l	2.0	--
Styrene	ND		ug/l	1.0	--
Dichlorodifluoromethane	ND		ug/l	2.0	--
Acetone	ND		ug/l	5.0	--
Carbon disulfide	ND		ug/l	2.0	--
Methyl ethyl ketone	ND		ug/l	5.0	--
Methyl isobutyl ketone	ND		ug/l	5.0	--
2-Hexanone	ND		ug/l	5.0	--
Bromochloromethane	ND		ug/l	2.0	--
Tetrahydrofuran	ND		ug/l	2.0	--
2,2-Dichloropropane	ND		ug/l	2.0	--
1,2-Dibromoethane	ND		ug/l	2.0	--
1,3-Dichloropropane	ND		ug/l	2.0	--
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--
Bromobenzene	ND		ug/l	2.0	--
n-Butylbenzene	ND		ug/l	2.0	--
sec-Butylbenzene	ND		ug/l	2.0	--
tert-Butylbenzene	ND		ug/l	2.0	--
o-Chlorotoluene	ND		ug/l	2.0	--



Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2516183
Report Date: 03/27/25

Method Blank Analysis Batch Quality Control

Analytical Method: 141,8260D
Analytical Date: 03/26/25 05:59
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-02,04-05 Batch: WG2045405-5					
p-Chlorotoluene	ND		ug/l	2.0	--
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--
Hexachlorobutadiene	ND		ug/l	0.60	--
Isopropylbenzene	ND		ug/l	2.0	--
p-Isopropyltoluene	ND		ug/l	2.0	--
Naphthalene	ND		ug/l	2.0	--
n-Propylbenzene	ND		ug/l	2.0	--
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--
Diethyl ether	ND		ug/l	2.0	--
Diisopropyl Ether	ND		ug/l	2.0	--
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--
1,4-Dioxane	ND		ug/l	250	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	110		70-130



Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2516183
Report Date: 03/27/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 141,8260D
 Analytical Date: 03/27/25 07:14
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 03 Batch: WG2045931-5					
Methylene chloride	ND		ug/l	2.0	--
1,1-Dichloroethane	ND		ug/l	1.0	--
Chloroform	ND		ug/l	1.0	--
Carbon tetrachloride	ND		ug/l	1.0	--
1,2-Dichloropropane	ND		ug/l	1.0	--
Dibromochloromethane	ND		ug/l	1.0	--
1,1,2-Trichloroethane	ND		ug/l	1.0	--
Tetrachloroethene	ND		ug/l	1.0	--
Chlorobenzene	ND		ug/l	1.0	--
Trichlorofluoromethane	ND		ug/l	2.0	--
1,2-Dichloroethane	ND		ug/l	1.0	--
1,1,1-Trichloroethane	ND		ug/l	1.0	--
Bromodichloromethane	ND		ug/l	1.0	--
trans-1,3-Dichloropropene	ND		ug/l	0.40	--
cis-1,3-Dichloropropene	ND		ug/l	0.40	--
1,3-Dichloropropene, Total	ND		ug/l	0.40	--
1,1-Dichloropropene	ND		ug/l	2.0	--
Bromoform	ND		ug/l	2.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--
Benzene	ND		ug/l	0.50	--
Toluene	ND		ug/l	1.0	--
Ethylbenzene	ND		ug/l	1.0	--
Chloromethane	ND		ug/l	2.0	--
Bromomethane	ND		ug/l	2.0	--
Vinyl chloride	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	2.0	--
1,1-Dichloroethene	ND		ug/l	1.0	--
trans-1,2-Dichloroethene	ND		ug/l	1.0	--
Trichloroethene	ND		ug/l	1.0	--



Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2516183
Report Date: 03/27/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 141,8260D
 Analytical Date: 03/27/25 07:14
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 03 Batch: WG2045931-5					
1,2-Dichlorobenzene	ND		ug/l	1.0	--
1,3-Dichlorobenzene	ND		ug/l	1.0	--
1,4-Dichlorobenzene	ND		ug/l	1.0	--
Methyl tert butyl ether	ND		ug/l	2.0	--
p/m-Xylene	ND		ug/l	2.0	--
o-Xylene	ND		ug/l	1.0	--
Xylenes, Total	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	1.0	--
1,2-Dichloroethene, Total	ND		ug/l	1.0	--
Dibromomethane	ND		ug/l	2.0	--
1,2,3-Trichloropropane	ND		ug/l	2.0	--
Styrene	ND		ug/l	1.0	--
Dichlorodifluoromethane	ND		ug/l	2.0	--
Acetone	ND		ug/l	5.0	--
Carbon disulfide	ND		ug/l	2.0	--
Methyl ethyl ketone	ND		ug/l	5.0	--
Methyl isobutyl ketone	ND		ug/l	5.0	--
2-Hexanone	ND		ug/l	5.0	--
Bromochloromethane	ND		ug/l	2.0	--
Tetrahydrofuran	ND		ug/l	2.0	--
2,2-Dichloropropane	ND		ug/l	2.0	--
1,2-Dibromoethane	ND		ug/l	2.0	--
1,3-Dichloropropane	ND		ug/l	2.0	--
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--
Bromobenzene	ND		ug/l	2.0	--
n-Butylbenzene	ND		ug/l	2.0	--
sec-Butylbenzene	ND		ug/l	2.0	--
tert-Butylbenzene	ND		ug/l	2.0	--
o-Chlorotoluene	ND		ug/l	2.0	--



Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2516183
Report Date: 03/27/25

Method Blank Analysis Batch Quality Control

Analytical Method: 141,8260D
Analytical Date: 03/27/25 07:14
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 03 Batch: WG2045931-5					
p-Chlorotoluene	ND		ug/l	2.0	--
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--
Hexachlorobutadiene	ND		ug/l	0.60	--
Isopropylbenzene	ND		ug/l	2.0	--
p-Isopropyltoluene	ND		ug/l	2.0	--
Naphthalene	ND		ug/l	2.0	--
n-Propylbenzene	ND		ug/l	2.0	--
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--
Diethyl ether	ND		ug/l	2.0	--
Diisopropyl Ether	ND		ug/l	2.0	--
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--
1,4-Dioxane	ND		ug/l	250	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	104		70-130



Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2516183

Report Date: 03/27/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-02,04-05 Batch: WG2045405-3 WG2045405-4								
Methylene chloride	100		100		70-130	0		20
1,1-Dichloroethane	100		100		70-130	0		20
Chloroform	100		100		70-130	0		20
Carbon tetrachloride	100		100		70-130	0		20
1,2-Dichloropropane	100		100		70-130	0		20
Dibromochloromethane	92		96		70-130	4		20
1,1,2-Trichloroethane	97		100		70-130	3		20
Tetrachloroethene	95		96		70-130	1		20
Chlorobenzene	99		99		70-130	0		20
Trichlorofluoromethane	100		110		70-130	10		20
1,2-Dichloroethane	100		100		70-130	0		20
1,1,1-Trichloroethane	100		100		70-130	0		20
Bromodichloromethane	97		100		70-130	3		20
trans-1,3-Dichloropropene	95		95		70-130	0		20
cis-1,3-Dichloropropene	97		99		70-130	2		20
1,1-Dichloropropene	100		100		70-130	0		20
Bromoform	86		88		70-130	2		20
1,1,2,2-Tetrachloroethane	95		98		70-130	3		20
Benzene	100		100		70-130	0		20
Toluene	98		100		70-130	2		20
Ethylbenzene	99		98		70-130	1		20
Chloromethane	99		100		70-130	1		20
Bromomethane	83		84		70-130	1		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2516183

Report Date: 03/27/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-02,04-05 Batch: WG2045405-3 WG2045405-4								
Vinyl chloride	120		120		70-130	0		20
Chloroethane	130		130		70-130	0		20
1,1-Dichloroethene	110		110		70-130	0		20
trans-1,2-Dichloroethene	100		110		70-130	10		20
Trichloroethene	100		100		70-130	0		20
1,2-Dichlorobenzene	96		99		70-130	3		20
1,3-Dichlorobenzene	96		96		70-130	0		20
1,4-Dichlorobenzene	95		98		70-130	3		20
Methyl tert butyl ether	94		97		70-130	3		20
p/m-Xylene	100		100		70-130	0		20
o-Xylene	100		100		70-130	0		20
cis-1,2-Dichloroethene	100		100		70-130	0		20
Dibromomethane	100		100		70-130	0		20
1,2,3-Trichloropropane	94		96		70-130	2		20
Styrene	95		95		70-130	0		20
Dichlorodifluoromethane	110		110		70-130	0		20
Acetone	110		110		70-130	0		20
Carbon disulfide	110		110		70-130	0		20
Methyl ethyl ketone	94		95		70-130	1		20
Methyl isobutyl ketone	92		91		70-130	1		20
2-Hexanone	89		91		70-130	2		20
Bromochloromethane	110		100		70-130	10		20
Tetrahydrofuran	97		97		70-130	0		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2516183

Report Date: 03/27/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-02,04-05 Batch: WG2045405-3 WG2045405-4								
2,2-Dichloropropane	100		100		70-130	0		20
1,2-Dibromoethane	97		98		70-130	1		20
1,3-Dichloropropane	97		100		70-130	3		20
1,1,1,2-Tetrachloroethane	91		97		70-130	6		20
Bromobenzene	95		97		70-130	2		20
n-Butylbenzene	99		100		70-130	1		20
sec-Butylbenzene	99		99		70-130	0		20
tert-Butylbenzene	97		98		70-130	1		20
o-Chlorotoluene	96		98		70-130	2		20
p-Chlorotoluene	95		99		70-130	4		20
1,2-Dibromo-3-chloropropane	90		90		70-130	0		20
Hexachlorobutadiene	90		90		70-130	0		20
Isopropylbenzene	98		98		70-130	0		20
p-Isopropyltoluene	97		99		70-130	2		20
Naphthalene	94		94		70-130	0		20
n-Propylbenzene	99		100		70-130	1		20
1,2,3-Trichlorobenzene	91		94		70-130	3		20
1,2,4-Trichlorobenzene	92		95		70-130	3		20
1,3,5-Trimethylbenzene	98		98		70-130	0		20
1,2,4-Trimethylbenzene	96		97		70-130	1		20
Diethyl ether	100		110		70-130	10		20
Diisopropyl Ether	96		98		70-130	2		20
Ethyl-Tert-Butyl-Ether	91		94		70-130	3		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2516183

Report Date: 03/27/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-02,04-05 Batch: WG2045405-3 WG2045405-4								
Tertiary-Amyl Methyl Ether	91		94		70-130	3		20
1,4-Dioxane	82		90		70-130	9		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	96		99		70-130
Toluene-d8	99		102		70-130
4-Bromofluorobenzene	96		96		70-130
Dibromofluoromethane	103		103		70-130

Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2516183

Report Date: 03/27/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 03 Batch: WG2045931-3 WG2045931-4								
Methylene chloride	100		110		70-130	10		20
1,1-Dichloroethane	110		110		70-130	0		20
Chloroform	110		100		70-130	10		20
Carbon tetrachloride	100		100		70-130	0		20
1,2-Dichloropropane	100		100		70-130	0		20
Dibromochloromethane	93		93		70-130	0		20
1,1,2-Trichloroethane	100		100		70-130	0		20
Tetrachloroethene	100		100		70-130	0		20
Chlorobenzene	100		99		70-130	1		20
Trichlorofluoromethane	110		110		70-130	0		20
1,2-Dichloroethane	110		110		70-130	0		20
1,1,1-Trichloroethane	100		100		70-130	0		20
Bromodichloromethane	97		98		70-130	1		20
trans-1,3-Dichloropropene	99		99		70-130	0		20
cis-1,3-Dichloropropene	95		96		70-130	1		20
1,1-Dichloropropene	110		100		70-130	10		20
Bromoform	85		85		70-130	0		20
1,1,2,2-Tetrachloroethane	96		96		70-130	0		20
Benzene	100		100		70-130	0		20
Toluene	100		100		70-130	0		20
Ethylbenzene	100		100		70-130	0		20
Chloromethane	110		100		70-130	10		20
Bromomethane	82		83		70-130	1		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2516183

Report Date: 03/27/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 03 Batch: WG2045931-3 WG2045931-4								
Vinyl chloride	110		110		70-130	0		20
Chloroethane	120		120		70-130	0		20
1,1-Dichloroethene	100		100		70-130	0		20
trans-1,2-Dichloroethene	110		110		70-130	0		20
Trichloroethene	100		100		70-130	0		20
1,2-Dichlorobenzene	99		99		70-130	0		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	100		99		70-130	1		20
Methyl tert butyl ether	99		100		70-130	1		20
p/m-Xylene	105		105		70-130	0		20
o-Xylene	105		100		70-130	5		20
cis-1,2-Dichloroethene	100		100		70-130	0		20
Dibromomethane	98		99		70-130	1		20
1,2,3-Trichloropropane	98		96		70-130	2		20
Styrene	100		100		70-130	0		20
Dichlorodifluoromethane	92		92		70-130	0		20
Acetone	120		120		70-130	0		20
Carbon disulfide	110		110		70-130	0		20
Methyl ethyl ketone	100		110		70-130	10		20
Methyl isobutyl ketone	92		89		70-130	3		20
2-Hexanone	96		94		70-130	2		20
Bromochloromethane	100		100		70-130	0		20
Tetrahydrofuran	110		110		70-130	0		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2516183

Report Date: 03/27/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 03 Batch: WG2045931-3 WG2045931-4								
2,2-Dichloropropane	110		100		70-130	10		20
1,2-Dibromoethane	100		97		70-130	3		20
1,3-Dichloropropane	100		100		70-130	0		20
1,1,1,2-Tetrachloroethane	98		96		70-130	2		20
Bromobenzene	96		96		70-130	0		20
n-Butylbenzene	110		110		70-130	0		20
sec-Butylbenzene	110		100		70-130	10		20
tert-Butylbenzene	100		100		70-130	0		20
o-Chlorotoluene	100		100		70-130	0		20
p-Chlorotoluene	100		100		70-130	0		20
1,2-Dibromo-3-chloropropane	82		84		70-130	2		20
Hexachlorobutadiene	100		100		70-130	0		20
Isopropylbenzene	100		100		70-130	0		20
p-Isopropyltoluene	100		100		70-130	0		20
Naphthalene	95		94		70-130	1		20
n-Propylbenzene	110		100		70-130	10		20
1,2,3-Trichlorobenzene	97		99		70-130	2		20
1,2,4-Trichlorobenzene	98		98		70-130	0		20
1,3,5-Trimethylbenzene	100		100		70-130	0		20
1,2,4-Trimethylbenzene	100		100		70-130	0		20
Diethyl ether	100		100		70-130	0		20
Diisopropyl Ether	110		110		70-130	0		20
Ethyl-Tert-Butyl-Ether	100		100		70-130	0		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2516183

Report Date: 03/27/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 03 Batch: WG2045931-3 WG2045931-4								
Tertiary-Amyl Methyl Ether	92		93		70-130	1		20
1,4-Dioxane	116		114		70-130	2		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	105		106		70-130
Toluene-d8	101		100		70-130
4-Bromofluorobenzene	95		96		70-130
Dibromofluoromethane	101		103		70-130

Project Name: TUFTS STREET
Project Number: 045163

Serial_No:03272519:17
Lab Number: L2516183
Report Date: 03/27/25

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2516183-01A	Vial HCl preserved	A	NA		2.4	Y	Absent		MCP-8260-21(14)
L2516183-01B	Vial HCl preserved	A	NA		2.4	Y	Absent		MCP-8260-21(14)
L2516183-01C	Vial HCl preserved	A	NA		2.4	Y	Absent		MCP-8260-21(14)
L2516183-02A	Vial HCl preserved	A	NA		2.4	Y	Absent		MCP-8260-21(14)
L2516183-02B	Vial HCl preserved	A	NA		2.4	Y	Absent		MCP-8260-21(14)
L2516183-02C	Vial HCl preserved	A	NA		2.4	Y	Absent		MCP-8260-21(14)
L2516183-03A	Vial HCl preserved	A	NA		2.4	Y	Absent		MCP-8260-21(14)
L2516183-03B	Vial HCl preserved	A	NA		2.4	Y	Absent		MCP-8260-21(14)
L2516183-03C	Vial HCl preserved	A	NA		2.4	Y	Absent		MCP-8260-21(14)
L2516183-04A	Vial HCl preserved	A	NA		2.4	Y	Absent		MCP-8260-21(14)
L2516183-04B	Vial HCl preserved	A	NA		2.4	Y	Absent		MCP-8260-21(14)
L2516183-04C	Vial HCl preserved	A	NA		2.4	Y	Absent		MCP-8260-21(14)
L2516183-05A	Vial HCl preserved	A	NA		2.4	Y	Absent		MCP-8260-21(14)
L2516183-05B	Vial HCl preserved	A	NA		2.4	Y	Absent		MCP-8260-21(14)
L2516183-05C	Vial HCl preserved	A	NA		2.4	Y	Absent		MCP-8260-21(14)

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2516183
Report Date: 03/27/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
	Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report



Project Name: TUFTS STREET
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Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

Report Format: Data Usability Report



Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2516183
Report Date: 03/27/25

Data Qualifiers

- ND** - Not detected at the reporting limit (RL) for the sample.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2516183
Report Date: 03/27/25

REFERENCES

- 141 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA and IIB, November 2021.

LIMITATION OF LIABILITIES

Pace Analytical Services performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Pace Analytical Services shall be to re-perform the work at it's own expense. In no event shall Pace Analytical Services be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Pace Analytical Services.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Pace Analytical Services LLCFacility: **Northeast**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**Revision **27**Published Date: **01/24/2025**Page **1** of **2****Certification Information**

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**EPA 624.1:** m/p-xylene, o-xylene, Naphthalene**EPA 625.1:** alpha-Terpineol**EPA 8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****SM 2540D:** TSS.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

MADEP-APH.**Nonpotable Water:** **EPA RSK-175 Dissolved Gases****Biological Tissue Matrix:** EPA 3050B**Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048****EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Nonpotable Water: **EPA RSK-175 Dissolved Gases**

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048**Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)**

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.****Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables).**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.****Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg. EPA 522, EPA 537.1.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1 Hg.****SM2340B**

Pace Analytical Services LLCID No.: **17873**Facility: **Northeast**

Revision 27

Department: **Quality Assurance**

Published Date: 01/24/2025

Title: **Certificate/Approval Program Summary**

Page 2 of 2

Certification IDs:**Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**

CT PH-0826, IL 200077, IN C-MA-03, KY JY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 3090, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048

ANAB/DoD L2474, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

For a complete listing of analytes and methods, please contact your Project Manager.



CHAIN OF CUSTODY

PAGE 1 OF 1

8 Walkup Drive
Westboro, MA 01581
Tel: 508-898-9220

320 Forbes Blvd
Mansfield, MA 02048
Tel: 508-822-9300

Project Information

Project Name: Tufts StProject Location: Somerville, MAProject #: 045163Project Manager: Chris Connor

ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved)

Date Due:

Date Rec'd In Lab: 3/20/25

ALP

L2516183
GEI

Report Information - Data Deliverables

☐ ADEx☒ EMAIL☒ Same as Client info

PO #:

Regulatory Requirements & Project Information Requirements

☒ Yes ☐ No MA MCP Analytical Methods☐ Yes ☐ No CT RCP Analytical Methods☐ Yes ☐ No Matrix Spike Required on this SDG? (Required for MCP Inorganics)☐ Yes ☐ No GW1 Standards (Info Required for Metals & EPH with Targets)☐ Yes ☐ No NPDES RGP☐ Other State /Fed Program Criteria

Client Information

Client: GEI Consultants IncAddress: 400 Unicorn Park DriveWoburn, MA 01801Phone: 781-721-4006Email: labdata@geiconsultants.com

Additional Project Information:

ALPHA Lab ID
(Lab Use Only)

Sample ID

Collection

Date

Time

Sample
MatrixSampler
Initials

ANALYSIS

VOC: ☒ 6260 ☐ 624 ☐ 524.2SVOC: ☐ ABN ☐ PAHMETALS: ☐ MCP 13 ☐ MCP 14 ☐ RCP 15METALS: ☐ RCRA5 ☐ RCRA8EPH: ☐ Ranges & Targets ☐ Ranges OnlyVPH: ☐ Ranges & Targets ☐ Ranges Only☐ PCB ☐ PESTTPH: ☐ Quant Only ☐ Fingerprint

SAMPLE INFO

Filtration

☐ Field☐ Lab to do

Preservation

☐ Lab to do

Sample Comments

TOTAL # BOTTLES

Container Type

P= Plastic
A= Amber glass
V= Vial
G= Glass
B= Bacteria cup
C= Cube
O= Other
E= Encore
D= BOD Bottle

Preservative

A= None
B= HCl
C= HNO₃
D= H₂SO₄
E= NaOH
F= MeOH
G= NaHSO₄
H= Na₂S₂O₃
I= Ascorbic Acid
J= NH₄Cl
K= Zn Acetate
O= Other

Container Type VPreservative B

Relinquished By:

Date/Time

Received By:

Date/Time

Julian Brady
GEI Fridge
3/19/25 1350
3/20/25 0937
3/20 1438
GEI Fridge
Shane Mason
3/19/25 1350
3/20 9:37
3/20/25 1438

All samples submitted are subject to
Alpha's Terms and Conditions.
See reverse side.

FORM NO: 01-01 (rev. 12-Mar-2012)

Method Blank Summary Form 4 Volatiles

Client : GEI Consultants
Project Name : TUFTS STREET
Lab Sample ID : WG2045405-5
Instrument ID : JACK
Matrix : WATER

Lab Number : L2516183
Project Number : 045163
Lab File ID : J250326A05
Analysis Date : 03/26/25 05:59

Client Sample No.	Lab Sample ID	Analysis Date
WG2045405-3LCS	WG2045405-3	03/26/25 04:39
WG2045405-4LCSD	WG2045405-4	03/26/25 05:06
045163-MW109	L2516183-05	03/26/25 10:37
045163-MW106	L2516183-04	03/26/25 11:04
045163-GEO-5	L2516183-02D	03/26/25 12:51
045163-GEO-4	L2516183-01D	03/26/25 13:17

Method Blank Summary Form 4 Volatiles

Client : GEI Consultants
Project Name : TUFTS STREET
Lab Sample ID : WG2045931-5
Instrument ID : VOA133
Matrix : WATER

Lab Number : L2516183
Project Number : 045163
Lab File ID : V133250327B10
Analysis Date : 03/27/25 07:14

Client Sample No.	Lab Sample ID	Analysis Date
WG2045931-3LCS	WG2045931-3	03/27/25 03:16
WG2045931-4LCSD	WG2045931-4	03/27/25 03:42
045163-GEO-6	L2516183-03D	03/27/25 08:06

Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : TUFTS STREET
 Instrument ID : JACK
 Lab File ID : J250326A02
 Sample No : WG2045405-2
 Channel :

Lab Number : L2516183
 Project Number : 045163
 Calibration Date : 03/26/25 04:39
 Init. Calib. Date(s) : 02/28/25 02/28/25
 Init. Calib. Times : 05:35 08:42

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	81	0
Dichlorodifluoromethane	0.28	0.313	-	-11.8	20	88	0
Chloromethane	0.294	0.291	-	1	20	80	0
Vinyl chloride	0.352	0.443	-	-25.9*	20	98	0
Bromomethane	0.178	0.147	-	17.4	20	69	0
Chloroethane	0.189	0.244	-	-29.1*	20	101	0
Trichlorofluoromethane	0.411	0.434	-	-5.6	20	82	0
Ethyl ether	0.116	0.121	-	-4.3	20	82	0
1,1-Dichloroethene	0.228	0.248	-	-8.8	20	88	0
Carbon disulfide	0.7	0.776	-	-10.9	20	90	0
Freon-113	0.246	0.258	-	-4.9	20	84	0
Acrolein	0.041	0.041	-	0	20	85	0
Methylene chloride	0.247	0.257	-	-4	20	84	0
Acetone	0.077	0.084	-	-9.1	20	91	0
trans-1,2-Dichloroethene	0.247	0.26	-	-5.3	20	83	0
Methyl acetate	0.167	0.161	-	3.6	20	80	0
Methyl tert-butyl ether	0.682	0.643	-	5.7	20	76	0
tert-Butyl alcohol	0.026	0.022	-	15.4	20	61	0
Diisopropyl ether	0.875	0.843	-	3.7	20	78	0
1,1-Dichloroethane	0.492	0.517	-	-5.1	20	85	0
Halothane	0.201	0.203	-	-1	20	80	0
Acrylonitrile	0.082	0.082	-	0	20	80	0
Ethyl tert-butyl ether	0.785	0.718	-	8.5	20	75	0
Vinyl acetate	0.688	0.63	-	8.4	20	76	0
cis-1,2-Dichloroethene	0.272	0.273	-	-0.4	20	81	0
2,2-Dichloropropane	0.423	0.424	-	-0.2	20	82	0
Bromochloromethane	0.122	0.131	-	-7.4	20	83	0
Cyclohexane	0.51	0.528	-	-3.5	20	84	0
Chloroform	0.462	0.468	-	-1.3	20	83	0
Ethyl acetate	0.269	0.24	-	10.8	20	72	0
Carbon tetrachloride	0.363	0.382	-	-5.2	20	82	0
Tetrahydrofuran	0.095	0.092	-	3.2	20	76	0
Dibromofluoromethane	0.264	0.271	-	-2.7	20	82	0
1,1,1-Trichloroethane	0.408	0.425	-	-4.2	20	84	0
2-Butanone	0.121	0.114	-	5.8	20	78	0
1,1-Dichloropropene	0.335	0.344	-	-2.7	20	81	0
Benzene	1.011	1.021	-	-1	20	82	0
tert-Amyl methyl ether	0.688	0.624	-	9.3	20	73	0
1,2-Dichloroethane-d4	0.324	0.313	-	3.4	20	79	0
1,2-Dichloroethane	0.355	0.359	-	-1.1	20	81	0
Methyl cyclohexane	0.47	0.47	-	0	20	84	0
Trichloroethene	0.271	0.271	-	0	20	80	0
Dibromomethane	0.153	0.156	-	-2	20	79	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : TUFTS STREET
 Instrument ID : JACK
 Lab File ID : J250326A02
 Sample No : WG2045405-2
 Channel :

Lab Number : L2516183
 Project Number : 045163
 Calibration Date : 03/26/25 04:39
 Init. Calib. Date(s) : 02/28/25 02/28/25
 Init. Calib. Times : 05:35 08:42

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,2-Dichloropropane	0.262	0.261	-	0.4	20	75	0
2-Chloroethyl vinyl ether	0.159	0.119	-	25.2*	20	57	0
Bromodichloromethane	0.344	0.333	-	3.2	20	75	0
1,4-Dioxane	0.00217	0.00179*	-	17.5	20	68	0
cis-1,3-Dichloropropene	0.409	0.397	-	2.9	20	74	0
Chlorobenzene-d5	1	1	-	0	20	80	0
Toluene-d8	1.318	1.31	-	0.6	20	80	0
Toluene	0.882	0.861	-	2.4	20	78	0
4-Methyl-2-pentanone	0.125	0.114	-	8.8	20	70	0
Tetrachloroethene	0.411	0.392	-	4.6	20	76	0
trans-1,3-Dichloropropene	0.495	0.47	-	5.1	20	73	0
Ethyl methacrylate	0.424	0.38	-	10.4	20	68	0
1,1,2-Trichloroethane	0.262	0.255	-	2.7	20	72	0
Chlorodibromomethane	0.365	0.335	-	8.2	20	70	0
1,3-Dichloropropane	0.486	0.472	-	2.9	20	75	0
1,2-Dibromoethane	0.295	0.286	-	3.1	20	73	0
2-Hexanone	0.255	0.227	-	11	20	67	0
Chlorobenzene	0.973	0.965	-	0.8	20	76	0
Ethylbenzene	1.752	1.734	-	1	20	78	0
1,1,1,2-Tetrachloroethane	0.357	0.327	-	8.4	20	70	0
p/m Xylene	0.685	0.669	-	2.3	20	78	0
o Xylene	0.658	0.644	-	2.1	20	77	0
Styrene	1.121	1.069	-	4.6	20	75	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	81	0
Bromoform	0.441	0.378	-	14.3	20	64	0
Isopropylbenzene	3.009	2.955	-	1.8	20	78	0
4-Bromofluorobenzene	0.855	0.824	-	3.6	20	79	0
Bromobenzene	0.72	0.684	-	5	20	72	0
n-Propylbenzene	3.645	3.604	-	1.1	20	78	0
1,4-Dichlorobutane	0.953	0.889	-	6.7	20	73	0
1,1,2,2-Tetrachloroethane	0.7	0.666	-	4.9	20	70	0
4-Ethyltoluene	2.97	2.926	-	1.5	20	78	0
2-Chlorotoluene	2.404	2.299	-	4.4	20	76	0
1,3,5-Trimethylbenzene	2.587	2.534	-	2	20	79	0
1,2,3-Trichloropropane	0.56	0.529	-	5.5	20	72	0
trans-1,4-Dichloro-2-buten	0.238	0.208	-	12.6	20	65	0
4-Chlorotoluene	2.179	2.069	-	5	20	74	0
tert-Butylbenzene	2.151	2.079	-	3.3	20	77	0
1,2,4-Trimethylbenzene	2.516	2.43	-	3.4	20	76	0
sec-Butylbenzene	3.283	3.243	-	1.2	20	79	0
p-Isopropyltoluene	2.792	2.7	-	3.3	20	77	0
1,3-Dichlorobenzene	1.47	1.415	-	3.7	20	75	0
1,4-Dichlorobenzene	1.47	1.398	-	4.9	20	74	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : TUFTS STREET
 Instrument ID : JACK
 Lab File ID : J250326A02
 Sample No : WG2045405-2
 Channel :

Lab Number : L2516183
 Project Number : 045163
 Calibration Date : 03/26/25 04:39
 Init. Calib. Date(s) : 02/28/25 02/28/25
 Init. Calib. Times : 05:35 08:42

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
p-Diethylbenzene	1.637	1.605	-	2	20	78	0
n-Butylbenzene	2.502	2.479	-	0.9	20	80	0
1,2-Dichlorobenzene	1.362	1.312	-	3.7	20	75	0
1,2,4,5-Tetramethylbenzene	2.513	2.31	-	8.1	20	74	0
1,2-Dibromo-3-chloropropan	0.133	0.12	-	9.8	20	70	0
1,3,5-Trichlorobenzene	1.072	0.981	-	8.5	20	73	0
Hexachlorobutadiene	0.458	0.413	-	9.8	20	76	0
1,2,4-Trichlorobenzene	0.948	0.869	-	8.3	20	74	0
Naphthalene	2.388	2.233	-	6.5	20	74	0
1,2,3-Trichlorobenzene	0.868	0.794	-	8.5	20	72	0

* Value outside of QC limits.

Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : TUFTS STREET
 Instrument ID : VOA133
 Lab File ID : V133250327B01
 Sample No : WG2045931-2
 Channel :

Lab Number : L2516183
 Project Number : 045163
 Calibration Date : 03/27/25 03:16
 Init. Calib. Date(s) : 03/12/25 03/12/25
 Init. Calib. Times : 07:01 10:06

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	72	0
Dichlorodifluoromethane	0.325	0.3	-	7.7	20	66	0
Chloromethane	0.36	0.39	-	-8.3	20	77	0
Vinyl chloride	0.314	0.346	-	-10.2	20	78	0
Bromomethane	0.145	0.12	-	17.2	20	64	0
Chloroethane	0.166	0.193	-	-16.3	20	82	0
Trichlorofluoromethane	0.366	0.41	-	-12	20	78	0
Ethyl ether	0.127	0.128	-	-0.8	20	72	0
1,1-Dichloroethene	0.225	0.235	-	-4.4	20	73	0
Carbon disulfide	0.684	0.741	-	-8.3	20	74	0
Freon-113	0.226	0.254	-	-12.4	20	76	0
Acrolein	0.043	0.047	-	-9.3	20	77	0
Methylene chloride	0.254	0.268	-	-5.5	20	75	0
Acetone	0.075	0.09	-	-20	20	82	0
trans-1,2-Dichloroethene	0.244	0.26	-	-6.6	20	73	0
Methyl acetate	0.177	0.203	-	-14.7	20	80	0
Methyl tert-butyl ether	0.676	0.672	-	0.6	20	68	0
tert-Butyl alcohol	0.03	0.028	-	6.7	20	64	0
Diisopropyl ether	0.896	0.985	-	-9.9	20	75	0
1,1-Dichloroethane	0.485	0.542	-	-11.8	20	75	0
Halothane	0.194	0.198	-	-2.1	20	70	0
Acrylonitrile	0.095	0.103	-	-8.4	20	76	0
Ethyl tert-butyl ether	0.834	0.847	-	-1.6	20	69	0
Vinyl acetate	0.588	0.699	-	-18.9	20	79	0
cis-1,2-Dichloroethene	0.273	0.282	-	-3.3	20	71	0
2,2-Dichloropropane	0.375	0.398	-	-6.1	20	75	0
Bromochloromethane	0.126	0.131	-	-4	20	70	0
Cyclohexane	0.498	0.587	-	-17.9	20	80	0
Chloroform	0.443	0.47	-	-6.1	20	73	0
Ethyl acetate	0.271	0.285	-	-5.2	20	73	0
Carbon tetrachloride	0.36	0.377	-	-4.7	20	73	0
Tetrahydrofuran	0.096	0.103	-	-7.3	20	74	0
Dibromofluoromethane	0.267	0.271	-	-1.5	20	73	0
1,1,1-Trichloroethane	0.388	0.404	-	-4.1	20	72	0
2-Butanone	0.127	0.134	-	-5.5	20	73	0
1,1-Dichloropropene	0.321	0.342	-	-6.5	20	74	0
Benzene	0.998	1.03	-	-3.2	20	71	0
tert-Amyl methyl ether	0.683	0.629	-	7.9	20	64	0
1,2-Dichloroethane-d4	0.319	0.336	-	-5.3	20	76	0
1,2-Dichloroethane	0.343	0.369	-	-7.6	20	74	0
Methyl cyclohexane	0.427	0.464	-	-8.7	20	73	0
Trichloroethene	0.269	0.273	-	-1.5	20	71	0
Dibromomethane	0.121	0.118	-	2.5	20	67	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : TUFTS STREET
 Instrument ID : VOA133
 Lab File ID : V133250327B01
 Sample No : WG2045931-2
 Channel :

Lab Number : L2516183
 Project Number : 045163
 Calibration Date : 03/27/25 03:16
 Init. Calib. Date(s) : 03/12/25 03/12/25
 Init. Calib. Times : 07:01 10:06

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,2-Dichloropropane	0.217	0.226	-	-4.1	20	71	0
2-Chloroethyl vinyl ether	0.135	0.107	-	20.7*	20	53	0
Bromodichloromethane	0.266	0.259*	-	2.6	20	65	0
1,4-Dioxane	0.00173	0.00203*	-	-17.3	20	80	0
cis-1,3-Dichloropropene	0.327	0.312	-	4.6	20	65	0
Chlorobenzene-d5	1	1	-	0	20	71	0
Toluene-d8	1.307	1.316	-	-0.7	20	71	0
Toluene	0.81	0.832	-	-2.7	20	68	0
4-Methyl-2-pentanone	0.13	0.119	-	8.5	20	59	0
Tetrachloroethene	0.356	0.374	-	-5.1	20	68	0
trans-1,3-Dichloropropene	0.48	0.476	-	0.8	20	62	0
Ethyl methacrylate	0.368	0.325	-	11.7	20	55	0
1,1,2-Trichloroethane	0.241	0.252	-	-4.6	20	65	0
Chlorodibromomethane	0.356	0.333	-	6.5	20	59	0
1,3-Dichloropropane	0.516	0.541	-	-4.8	20	66	0
1,2-Dibromoethane	0.298	0.3	-	-0.7	20	65	0
2-Hexanone	0.221	0.213	-	3.6	20	60	0
Chlorobenzene	0.927	0.937	-	-1.1	20	65	0
Ethylbenzene	1.547	1.636	-	-5.8	20	67	.01
1,1,1,2-Tetrachloroethane	0.341	0.335	-	1.8	20	61	0
p/m Xylene	0.608	0.653	-	-7.4	20	67	0
o Xylene	0.602	0.628	-	-4.3	20	65	0
Styrene	0.985	0.998	-	-1.3	20	63	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	72	0
Bromoform	0.431	0.367	-	14.8	20	56	.01
Isopropylbenzene	2.813	2.856	-	-1.5	20	66	0
4-Bromofluorobenzene	0.926	0.883	-	4.6	20	70	0
Bromobenzene	0.701	0.676	-	3.6	20	64	0
n-Propylbenzene	3.323	3.553	-	-6.9	20	68	0
1,4-Dichlorobutane	0.999	1.001	-	-0.2	20	65	0
1,1,2,2-Tetrachloroethane	0.724	0.693	-	4.3	20	60	0
4-Ethyltoluene	2.779	2.925	-	-5.3	20	66	0
2-Chlorotoluene	2.289	2.377	-	-3.8	20	66	.01
1,3,5-Trimethylbenzene	2.407	2.501	-	-3.9	20	66	0
1,2,3-Trichloropropane	0.581	0.572	-	1.5	20	63	0
trans-1,4-Dichloro-2-buten	0.247	0.239	-	3.2	20	62	0
4-Chlorotoluene	2.105	2.147	-	-2	20	66	0
tert-Butylbenzene	2.085	2.124	-	-1.9	20	65	0
1,2,4-Trimethylbenzene	2.39	2.468	-	-3.3	20	65	0
sec-Butylbenzene	2.992	3.188	-	-6.6	20	67	.01
p-Isopropyltoluene	2.645	2.785	-	-5.3	20	66	0
1,3-Dichlorobenzene	1.375	1.402	-	-2	20	66	0
1,4-Dichlorobenzene	1.387	1.387	-	0	20	64	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : TUFTS STREET
 Instrument ID : VOA133
 Lab File ID : V133250327B01
 Sample No : WG2045931-2
 Channel :

Lab Number : L2516183
 Project Number : 045163
 Calibration Date : 03/27/25 03:16
 Init. Calib. Date(s) : 03/12/25 03/12/25
 Init. Calib. Times : 07:01 10:06

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
p-Diethylbenzene	1.592	1.634	-	-2.6	20	65	0
n-Butylbenzene	2.243	2.458	-	-9.6	20	69	.01
1,2-Dichlorobenzene	1.297	1.288	-	0.7	20	64	0
1,2,4,5-Tetramethylbenzene	2.449	2.362	-	3.6	20	62	.01
1,2-Dibromo-3-chloropropan	0.138	0.114	-	17.4	20	55	0
1,3,5-Trichlorobenzene	0.971	0.99	-	-2	20	64	.01
Hexachlorobutadiene	0.348	0.35	-	-0.6	20	68	.01
1,2,4-Trichlorobenzene	0.869	0.854	-	1.7	20	63	.01
Naphthalene	2.372	2.245	-	5.4	20	61	.01
1,2,3-Trichlorobenzene	0.801	0.779	-	2.7	20	63	.01

* Value outside of QC limits.



ANALYTICAL REPORT

Lab Number:	L2524944
Client:	GEI Consultants 400 Unicorn Park Drive Woburn, MA 01801
ATTN:	Chris Coner
Phone:	(781) 721-4000
Project Name:	TUFTS STREET
Project Number:	045163
Report Date:	05/02/25

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2524944
Report Date: 05/02/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2524944-01	045163-MW108	WATER	SOMERVILLE, MA	04/22/25 09:40	04/23/25
L2524944-02	045163-MW120S	WATER	SOMERVILLE, MA	04/22/25 11:00	04/23/25
L2524944-03	045163-MW118	WATER	SOMERVILLE, MA	04/22/25 11:37	04/23/25
L2524944-04	045163-MW120D	WATER	SOMERVILLE, MA	04/22/25 12:20	04/23/25
L2524944-05	045163-MW107	WATER	SOMERVILLE, MA	04/22/25 12:45	04/23/25
L2524944-06	045163-MW119S	WATER	SOMERVILLE, MA	04/22/25 13:45	04/23/25
L2524944-07	045163-MW115R	WATER	SOMERVILLE, MA	04/22/25 14:00	04/23/25
L2524944-08	045163-MW119T	WATER	SOMERVILLE, MA	04/22/25 14:30	04/23/25

Project Name: TUFTS STREET

Lab Number: L2524944

Project Number: 045163

Report Date: 05/02/25

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES
A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	NO
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	YES
For any questions answered "No", please refer to the case narrative section on the following page(s).		

Please note that sample matrix information is located in the Sample Results section of this report.



Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2524944
Report Date: 05/02/25

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Pace Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Pace's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Pace Project Manager and made arrangements for Pace to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2524944
Report Date: 05/02/25

Case Narrative (continued)

MCP Related Narratives

Volatile Organics

In reference to question H:

L2524944-01 through -08: Initial Calibration did not meet:

Lowest Calibration Standard Minimum Response Factor: 1,4-dioxane (0.0019)

Average Response Factor: 1,4-dioxane

Verification: dichlorodifluoromethane (136%)

L2524944-01 through -08: The associated continuing calibration standard is outside the acceptance criteria for several compounds; however, it is within overall method allowances. Associated results are considered to be biased high if the %D is negative and biased low if the %D is positive. A copy of the continuing calibration standard is included as an addendum to this report.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:



Kelly O'Neill

Title: Technical Director/Representative

Date: 05/02/25

QC OUTLIER SUMMARY REPORT

Project Name: TUFTS STREET**Project Number:** 045163**Lab Number:** L2524944**Report Date:** 05/02/25

Method	Client ID (Native ID)	Lab ID	Parameter	QC Type	Recovery/RPD (%)	QC Limits (%)	Associated Samples	Data Quality Assessment
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There are no QC Outliers associated with this report.

ORGANICS

VOLATILES

Project Name: TUFTS STREET**Lab Number:** L2524944**Project Number:** 045163**Report Date:** 05/02/25**SAMPLE RESULTS**

Lab ID: L2524944-01
 Client ID: 045163-MW108
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 09:40
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 141,8260D
 Analytical Date: 05/01/25 11:00
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: TUFTS STREET

Lab Number: L2524944

Project Number: 045163

Report Date: 05/02/25

SAMPLE RESULTS

Lab ID: L2524944-01
 Client ID: 045163-MW108
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 09:40
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2524944**Project Number:** 045163**Report Date:** 05/02/25**SAMPLE RESULTS**

Lab ID: L2524944-01
 Client ID: 045163-MW108
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 09:40
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	113		70-130

Project Name: TUFTS STREET**Lab Number:** L2524944**Project Number:** 045163**Report Date:** 05/02/25**SAMPLE RESULTS**

Lab ID: L2524944-02
 Client ID: 045163-MW120S
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 11:00
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 141,8260D
 Analytical Date: 05/01/25 11:26
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2524944**Project Number:** 045163**Report Date:** 05/02/25**SAMPLE RESULTS**

Lab ID: L2524944-02
 Client ID: 045163-MW120S
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 11:00
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2524944**Project Number:** 045163**Report Date:** 05/02/25**SAMPLE RESULTS**

Lab ID: L2524944-02
 Client ID: 045163-MW120S
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 11:00
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	114		70-130

Project Name: TUFTS STREET**Lab Number:** L2524944**Project Number:** 045163**Report Date:** 05/02/25**SAMPLE RESULTS**

Lab ID: L2524944-03
 Client ID: 045163-MW118
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 11:37
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 141,8260D
 Analytical Date: 05/01/25 11:53
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	12		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	1.5		ug/l	1.0	--	1
Chloroethane	5.6		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2524944**Project Number:** 045163**Report Date:** 05/02/25**SAMPLE RESULTS**

Lab ID: L2524944-03
 Client ID: 045163-MW118
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 11:37
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	2.3		ug/l	1.0	--	1
1,2-Dichloroethene, Total	2.3		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2524944**Project Number:** 045163**Report Date:** 05/02/25**SAMPLE RESULTS**

Lab ID: L2524944-03
 Client ID: 045163-MW118
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 11:37
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	114		70-130

Project Name: TUFTS STREET**Lab Number:** L2524944**Project Number:** 045163**Report Date:** 05/02/25**SAMPLE RESULTS**

Lab ID: L2524944-04
 Client ID: 045163-MW120D
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 12:20
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 141,8260D
 Analytical Date: 05/01/25 12:20
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	1.9		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	5.0		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	1.3		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2524944**Project Number:** 045163**Report Date:** 05/02/25**SAMPLE RESULTS**

Lab ID: L2524944-04
 Client ID: 045163-MW120D
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 12:20
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	2.2		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2524944**Project Number:** 045163**Report Date:** 05/02/25**SAMPLE RESULTS**

Lab ID: L2524944-04
 Client ID: 045163-MW120D
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 12:20
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	113		70-130

Project Name: TUFTS STREET**Lab Number:** L2524944**Project Number:** 045163**Report Date:** 05/02/25**SAMPLE RESULTS**

Lab ID: L2524944-05
 Client ID: 045163-MW107
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 12:45
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 141,8260D
 Analytical Date: 05/01/25 12:46
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2524944**Project Number:** 045163**Report Date:** 05/02/25**SAMPLE RESULTS**

Lab ID: L2524944-05
 Client ID: 045163-MW107
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 12:45
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2524944**Project Number:** 045163**Report Date:** 05/02/25**SAMPLE RESULTS**

Lab ID: L2524944-05
 Client ID: 045163-MW107
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 12:45
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	113		70-130

Project Name: TUFTS STREET**Lab Number:** L2524944**Project Number:** 045163**Report Date:** 05/02/25**SAMPLE RESULTS**

Lab ID: L2524944-06
 Client ID: 045163-MW119S
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 13:45
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 141,8260D
 Analytical Date: 05/01/25 13:13
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2524944**Project Number:** 045163**Report Date:** 05/02/25**SAMPLE RESULTS**

Lab ID: L2524944-06
 Client ID: 045163-MW119S
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 13:45
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2524944**Project Number:** 045163**Report Date:** 05/02/25**SAMPLE RESULTS**

Lab ID: L2524944-06
 Client ID: 045163-MW119S
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 13:45
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	115		70-130

Project Name: TUFTS STREET**Lab Number:** L2524944**Project Number:** 045163**Report Date:** 05/02/25**SAMPLE RESULTS**

Lab ID: L2524944-07
 Client ID: 045163-MW115R
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 14:00
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 141,8260D
 Analytical Date: 05/01/25 13:40
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2524944**Project Number:** 045163**Report Date:** 05/02/25**SAMPLE RESULTS**

Lab ID: L2524944-07
 Client ID: 045163-MW115R
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 14:00
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2524944**Project Number:** 045163**Report Date:** 05/02/25**SAMPLE RESULTS**

Lab ID: L2524944-07
 Client ID: 045163-MW115R
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 14:00
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	116		70-130

Project Name: TUFTS STREET**Lab Number:** L2524944**Project Number:** 045163**Report Date:** 05/02/25**SAMPLE RESULTS**

Lab ID: L2524944-08
 Client ID: 045163-MW119T
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 14:30
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 141,8260D
 Analytical Date: 05/01/25 14:06
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	2.2		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	3.3		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2524944**Project Number:** 045163**Report Date:** 05/02/25**SAMPLE RESULTS**

Lab ID: L2524944-08
 Client ID: 045163-MW119T
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 14:30
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	3.0		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2524944**Project Number:** 045163**Report Date:** 05/02/25**SAMPLE RESULTS**

Lab ID: L2524944-08
 Client ID: 045163-MW119T
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 14:30
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	116		70-130

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2524944
Report Date: 05/02/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 141,8260D
Analytical Date: 05/01/25 06:33
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-08 Batch: WG2061094-5					
Methylene chloride	ND		ug/l	2.0	--
1,1-Dichloroethane	ND		ug/l	1.0	--
Chloroform	ND		ug/l	1.0	--
Carbon tetrachloride	ND		ug/l	1.0	--
1,2-Dichloropropane	ND		ug/l	1.0	--
Dibromochloromethane	ND		ug/l	1.0	--
1,1,2-Trichloroethane	ND		ug/l	1.0	--
Tetrachloroethene	ND		ug/l	1.0	--
Chlorobenzene	ND		ug/l	1.0	--
Trichlorofluoromethane	ND		ug/l	2.0	--
1,2-Dichloroethane	ND		ug/l	1.0	--
1,1,1-Trichloroethane	ND		ug/l	1.0	--
Bromodichloromethane	ND		ug/l	1.0	--
trans-1,3-Dichloropropene	ND		ug/l	0.40	--
cis-1,3-Dichloropropene	ND		ug/l	0.40	--
1,3-Dichloropropene, Total	ND		ug/l	0.40	--
1,1-Dichloropropene	ND		ug/l	2.0	--
Bromoform	ND		ug/l	2.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--
Benzene	ND		ug/l	0.50	--
Toluene	ND		ug/l	1.0	--
Ethylbenzene	ND		ug/l	1.0	--
Chloromethane	ND		ug/l	2.0	--
Bromomethane	ND		ug/l	2.0	--
Vinyl chloride	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	2.0	--
1,1-Dichloroethene	ND		ug/l	1.0	--
trans-1,2-Dichloroethene	ND		ug/l	1.0	--
Trichloroethene	ND		ug/l	1.0	--



Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2524944
Report Date: 05/02/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 141,8260D
Analytical Date: 05/01/25 06:33
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-08 Batch: WG2061094-5					
1,2-Dichlorobenzene	ND		ug/l	1.0	--
1,3-Dichlorobenzene	ND		ug/l	1.0	--
1,4-Dichlorobenzene	ND		ug/l	1.0	--
Methyl tert butyl ether	ND		ug/l	2.0	--
p/m-Xylene	ND		ug/l	2.0	--
o-Xylene	ND		ug/l	1.0	--
Xylenes, Total	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	1.0	--
1,2-Dichloroethene, Total	ND		ug/l	1.0	--
Dibromomethane	ND		ug/l	2.0	--
1,2,3-Trichloropropane	ND		ug/l	2.0	--
Styrene	ND		ug/l	1.0	--
Dichlorodifluoromethane	ND		ug/l	2.0	--
Acetone	ND		ug/l	5.0	--
Carbon disulfide	ND		ug/l	2.0	--
Methyl ethyl ketone	ND		ug/l	5.0	--
Methyl isobutyl ketone	ND		ug/l	5.0	--
2-Hexanone	ND		ug/l	5.0	--
Bromochloromethane	ND		ug/l	2.0	--
Tetrahydrofuran	ND		ug/l	2.0	--
2,2-Dichloropropane	ND		ug/l	2.0	--
1,2-Dibromoethane	ND		ug/l	2.0	--
1,3-Dichloropropane	ND		ug/l	2.0	--
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--
Bromobenzene	ND		ug/l	2.0	--
n-Butylbenzene	ND		ug/l	2.0	--
sec-Butylbenzene	ND		ug/l	2.0	--
tert-Butylbenzene	ND		ug/l	2.0	--
o-Chlorotoluene	ND		ug/l	2.0	--



Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2524944
Report Date: 05/02/25

Method Blank Analysis Batch Quality Control

Analytical Method: 141,8260D
Analytical Date: 05/01/25 06:33
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-08 Batch: WG2061094-5					
p-Chlorotoluene	ND		ug/l	2.0	--
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--
Hexachlorobutadiene	ND		ug/l	0.60	--
Isopropylbenzene	ND		ug/l	2.0	--
p-Isopropyltoluene	ND		ug/l	2.0	--
Naphthalene	ND		ug/l	2.0	--
n-Propylbenzene	ND		ug/l	2.0	--
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--
Diethyl ether	ND		ug/l	2.0	--
Diisopropyl Ether	ND		ug/l	2.0	--
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--
1,4-Dioxane	ND		ug/l	250	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	113		70-130

Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2524944

Report Date: 05/02/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-08 Batch: WG2061094-3 WG2061094-4								
Methylene chloride	99		97		70-130	2		20
1,1-Dichloroethane	100		100		70-130	0		20
Chloroform	94		97		70-130	3		20
Carbon tetrachloride	100		100		70-130	0		20
1,2-Dichloropropane	99		100		70-130	1		20
Dibromochloromethane	85		86		70-130	1		20
1,1,2-Trichloroethane	88		85		70-130	3		20
Tetrachloroethene	86		84		70-130	2		20
Chlorobenzene	88		88		70-130	0		20
Trichlorofluoromethane	96		94		70-130	2		20
1,2-Dichloroethane	89		92		70-130	3		20
1,1,1-Trichloroethane	100		100		70-130	0		20
Bromodichloromethane	97		94		70-130	3		20
trans-1,3-Dichloropropene	83		82		70-130	1		20
cis-1,3-Dichloropropene	90		91		70-130	1		20
1,1-Dichloropropene	93		94		70-130	1		20
Bromoform	80		80		70-130	0		20
1,1,2,2-Tetrachloroethane	80		83		70-130	4		20
Benzene	96		94		70-130	2		20
Toluene	86		84		70-130	2		20
Ethylbenzene	85		84		70-130	1		20
Chloromethane	120		120		70-130	0		20
Bromomethane	74		77		70-130	4		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2524944

Report Date: 05/02/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-08 Batch: WG2061094-3 WG2061094-4								
Vinyl chloride	78		77		70-130	1		20
Chloroethane	74		75		70-130	1		20
1,1-Dichloroethene	93		98		70-130	5		20
trans-1,2-Dichloroethene	95		96		70-130	1		20
Trichloroethene	95		94		70-130	1		20
1,2-Dichlorobenzene	85		86		70-130	1		20
1,3-Dichlorobenzene	85		85		70-130	0		20
1,4-Dichlorobenzene	86		86		70-130	0		20
Methyl tert butyl ether	89		89		70-130	0		20
p/m-Xylene	85		85		70-130	0		20
o-Xylene	85		85		70-130	0		20
cis-1,2-Dichloroethene	95		93		70-130	2		20
Dibromomethane	91		95		70-130	4		20
1,2,3-Trichloropropane	80		79		70-130	1		20
Styrene	85		80		70-130	6		20
Dichlorodifluoromethane	91		92		70-130	1		20
Acetone	100		90		70-130	11		20
Carbon disulfide	99		100		70-130	1		20
Methyl ethyl ketone	83		84		70-130	1		20
Methyl isobutyl ketone	78		77		70-130	1		20
2-Hexanone	79		80		70-130	1		20
Bromochloromethane	100		100		70-130	0		20
Tetrahydrofuran	100		110		70-130	10		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2524944

Report Date: 05/02/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-08 Batch: WG2061094-3 WG2061094-4								
2,2-Dichloropropane	95		96		70-130	1		20
1,2-Dibromoethane	86		87		70-130	1		20
1,3-Dichloropropane	88		85		70-130	3		20
1,1,1,2-Tetrachloroethane	87		87		70-130	0		20
Bromobenzene	87		86		70-130	1		20
n-Butylbenzene	85		86		70-130	1		20
sec-Butylbenzene	86		86		70-130	0		20
tert-Butylbenzene	88		88		70-130	0		20
o-Chlorotoluene	84		84		70-130	0		20
p-Chlorotoluene	85		85		70-130	0		20
1,2-Dibromo-3-chloropropane	81		88		70-130	8		20
Hexachlorobutadiene	82		84		70-130	2		20
Isopropylbenzene	85		85		70-130	0		20
p-Isopropyltoluene	90		90		70-130	0		20
Naphthalene	87		88		70-130	1		20
n-Propylbenzene	85		85		70-130	0		20
1,2,3-Trichlorobenzene	84		85		70-130	1		20
1,2,4-Trichlorobenzene	82		84		70-130	2		20
1,3,5-Trimethylbenzene	86		86		70-130	0		20
1,2,4-Trimethylbenzene	87		86		70-130	1		20
Diethyl ether	100		100		70-130	0		20
Diisopropyl Ether	100		99		70-130	1		20
Ethyl-Tert-Butyl-Ether	90		88		70-130	2		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2524944

Report Date: 05/02/25

Parameter	LCS %Recovery	Qual	LCS %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-08 Batch: WG2061094-3 WG2061094-4								
Tertiary-Amyl Methyl Ether	82		82		70-130	0		20
1,4-Dioxane	88		88		70-130	0		20

Surrogate	LCS %Recovery	Qual	LCS %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	97		98		70-130
Toluene-d8	95		97		70-130
4-Bromofluorobenzene	92		92		70-130
Dibromofluoromethane	105		108		70-130

Project Name: TUFTS STREET
Project Number: 045163

Serial_No:05022514:07
Lab Number: L2524944
Report Date: 05/02/25

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2524944-01A	Vial HCl preserved	A	NA		5.6	Y	Absent		MCP-8260-21(14)
L2524944-01B	Vial HCl preserved	A	NA		5.6	Y	Absent		MCP-8260-21(14)
L2524944-01C	Vial HCl preserved	A	NA		5.6	Y	Absent		MCP-8260-21(14)
L2524944-02A	Vial HCl preserved	A	NA		5.6	Y	Absent		MCP-8260-21(14)
L2524944-02B	Vial HCl preserved	A	NA		5.6	Y	Absent		MCP-8260-21(14)
L2524944-02C	Vial HCl preserved	A	NA		5.6	Y	Absent		MCP-8260-21(14)
L2524944-03A	Vial HCl preserved	A	NA		5.6	Y	Absent		MCP-8260-21(14)
L2524944-03B	Vial HCl preserved	A	NA		5.6	Y	Absent		MCP-8260-21(14)
L2524944-03C	Vial HCl preserved	A	NA		5.6	Y	Absent		MCP-8260-21(14)
L2524944-04A	Vial HCl preserved	A	NA		5.6	Y	Absent		MCP-8260-21(14)
L2524944-04B	Vial HCl preserved	A	NA		5.6	Y	Absent		MCP-8260-21(14)
L2524944-04C	Vial HCl preserved	A	NA		5.6	Y	Absent		MCP-8260-21(14)
L2524944-05A	Vial HCl preserved	A	NA		5.6	Y	Absent		MCP-8260-21(14)
L2524944-05B	Vial HCl preserved	A	NA		5.6	Y	Absent		MCP-8260-21(14)
L2524944-05C	Vial HCl preserved	A	NA		5.6	Y	Absent		MCP-8260-21(14)
L2524944-06A	Vial HCl preserved	A	NA		5.6	Y	Absent		MCP-8260-21(14)
L2524944-06B	Vial HCl preserved	A	NA		5.6	Y	Absent		MCP-8260-21(14)
L2524944-06C	Vial HCl preserved	A	NA		5.6	Y	Absent		MCP-8260-21(14)
L2524944-07A	Vial HCl preserved	A	NA		5.6	Y	Absent		MCP-8260-21(14)
L2524944-07B	Vial HCl preserved	A	NA		5.6	Y	Absent		MCP-8260-21(14)
L2524944-07C	Vial HCl preserved	A	NA		5.6	Y	Absent		MCP-8260-21(14)
L2524944-08A	Vial HCl preserved	A	NA		5.6	Y	Absent		MCP-8260-21(14)
L2524944-08B	Vial HCl preserved	A	NA		5.6	Y	Absent		MCP-8260-21(14)

Project Name: TUFTS STREET
Project Number: 045163

Serial_No:05022514:07
Lab Number: L2524944
Report Date: 05/02/25

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2524944-08C	Vial HCl preserved	A	NA		5.6	Y	Absent		MCP-8260-21(14)

Container Comments

L2524944-07C Container Received Empty.

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2524944
Report Date: 05/02/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report



Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2524944
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Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

Report Format: Data Usability Report



Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2524944
Report Date: 05/02/25

Data Qualifiers

- ND** - Not detected at the reporting limit (RL) for the sample.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: TUFTS STREET**Lab Number:** L2524944**Project Number:** 045163**Report Date:** 05/02/25

REFERENCES

- 141 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA and IIB, November 2021.

LIMITATION OF LIABILITIES

Pace Analytical Services performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Pace Analytical Services shall be to re-perform the work at its own expense. In no event shall Pace Analytical Services be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Pace Analytical Services.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Pace Analytical Services LLCFacility: **Northeast**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

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Certification Information**The following analytes are not included in our Primary NELAP Scope of Accreditation:****Westborough Facility – 8 Walkup Dr. Westborough, MA 01581****EPA 624.1:** m/p-xylene, o-xylene, Naphthalene**EPA 625.1:** alpha-Terpineol**EPA 8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****SM 2540D:** TSS.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

MADEP-APH.**Nonpotable Water:** EPA RSK-175 Dissolved Gases**Biological Tissue Matrix:** EPA 3050B**Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048****EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Nonpotable Water: EPA RSK-175 Dissolved Gases**The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:****Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)****The following analytes are included in our Massachusetts DEP Scope of Accreditation****Westborough Facility – 8 Walkup Dr. Westborough, MA 01581****Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables).**Microbiology:** SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg. EPA 522, EPA 537.1.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1 Hg.****SM2340B**

Pace Analytical Services LLCID No.:**17873**Facility: **Northeast**

Revision 27

Department: **Quality Assurance**

Published Date: 01/24/2025

Title: **Certificate/Approval Program Summary**

Page 2 of 2

Certification IDs:**Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**

CT PH-0826, IL 200077, IN C-MA-03, KY JY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 3090, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048

ANAB/DoD L2474, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

For a complete listing of analytes and methods, please contact your Project Manager.

Chain-of-Custody Record				Laboratory: <u>Pace</u>				Laboratory Job # <u>12524944</u> (Lab use only)																					
 GEI Consultants 400 Unicorn Park Drive Woburn, MA 01801 PH: 781.721.4000				Project Information								Page <u>1</u> of <u>1</u> Sample Handling Samples Field Filtered YES ☒ NO ☐ Sampled Shipped With Ice YES ☒ NO ☐ Sample Specific Remarks																	
				Project Name: <u>Tufts St</u>				Project Location: <u>Somerville, MA</u>																					
				Project Number: <u>045163</u>				Project Manager: <u>Chris Conner</u> <u>cconner@geiconsultants.com</u>																					
				Send Report to: <u>labdata@geiconsultants.com</u> <u>mforrest@geiconsultants.com</u>				Preservative																					
MCP PRESUMPTIVE CERTAINTY AND MCP ANALYTICAL METHODS REQUIRED: ☒ YES ☐ NO				HCl <table border="1" style="width:100%; height: 100px;"><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table> VOC <table border="1" style="width:100%; height: 100px;"><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>																									
STATE AND FEDERAL REGULATORY REQUIREMENTS/REPORT LIMITS State/Federal Program: ☒ MA 401WQC Other ☐ NH ☐ RI ☐ CT ☐ NY ☐ ME MA MCP Criteria are Method 1 S-1 and GW-2/GW-3. Circle if GW-1 is required.																													
Lab Sample Number	GEI Sample ID	Collection Date Time		Matrix	No. of Bottles	Sampler(s) Initials																							
	045163-MW108	4/22/25	0940	GW	3	JWG	X																						
	045163-MW120S	4/22/25	1100	GW	3	NMT	X																						
	045163-MW118D	4/22/25	1137	GW	3	JWG	X																						
	045163-MW120D	4/22/25	1220	GW	3	NMT	X																						
	045163-MW107	4/22/25	1245	GW	3	JWG	X																						
	045163-MW119S	4/22/25	1345	GW	3	NMT	X																						
	045163-MW115R	4/22/25	1400	GW	3	JWG	X					LOW VOLUME																	
	045163-MW119T	4/22/25	1430	GW	3	NMT	X																						
Relinquished by sampler: (signature)		Date:	Time:	Received by: (signature)		Turnaround Time (Business days): Normal ☒ 4-Day ☐ 3-Day ☐ 2-Day ☐ 1-Day ☐ Other ☐			Before submitting rush turnaround samples, you must notify the laboratory to confirm that the TAT can be achieved.																				
1. <u>William D. Waff</u>		4/22/25	1530	1. <u>GEI sample fridge</u>																									
Relinquished by sampler: (signature)		Date:	Time:	Received by: (signature)		Additional Requirements/Comments/Remarks:																							
2. <u>GEI sample fridge</u>		4/23/25	1237	2. <u>Charles Demco</u>																									
Relinquished by: (signature)		Date:	Time:	Received by: (signature)																									
3. <u>Charles Demco</u>		4/23/25	1237	3. <u>Rob Manto</u> 4.23.25 12:37																									
Relinquished by: (signature)		Date:	Time:	Received by: (signature)																									
4. <u>Rob Manto</u>		4.23.25	1630	4. <u>[Signature]</u>																									
Relinquished by: (signature)		Date:	Time:	Received by: (signature)																									
5.				5.																									

Method Blank Summary Form 4 Volatiles

Client : GEI Consultants
Project Name : TUFTS STREET
Lab Sample ID : WG2061094-5
Instrument ID : JACK
Matrix : WATER

Lab Number : L2524944
Project Number : 045163
Lab File ID : J250501B05
Analysis Date : 05/01/25 06:33

Client Sample No.	Lab Sample ID	Analysis Date
WG2061094-3LCS	WG2061094-3	05/01/25 04:46
WG2061094-4LCSD	WG2061094-4	05/01/25 05:13
045163-MW108	L2524944-01	05/01/25 11:00
045163-MW120S	L2524944-02	05/01/25 11:26
045163-MW118	L2524944-03	05/01/25 11:53
045163-MW120D	L2524944-04	05/01/25 12:20
045163-MW107	L2524944-05	05/01/25 12:46
045163-MW119S	L2524944-06	05/01/25 13:13
045163-MW115R	L2524944-07	05/01/25 13:40
045163-MW119T	L2524944-08	05/01/25 14:06

Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : TUFTS STREET
 Instrument ID : JACK
 Lab File ID : J250501B01
 Sample No : WG2061094-2
 Channel :

Lab Number : L2524944
 Project Number : 045163
 Calibration Date : 05/01/25 04:46
 Init. Calib. Date(s) : 02/28/25 02/28/25
 Init. Calib. Times : 05:35 08:42

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	105	0
Dichlorodifluoromethane	0.28	0.254	-	9.3	20	93	0
Chloromethane	0.294	0.348	-	-18.4	20	124	0
Vinyl chloride	0.352	0.276	-	21.6*	20	80	0
Bromomethane	0.178	0.131	-	26.4*	20	80	0
Chloroethane	0.189	0.139	-	26.5*	20	75	0
Trichlorofluoromethane	0.411	0.392	-	4.6	20	96	0
Ethyl ether	0.116	0.117	-	-0.9	20	104	0
1,1-Dichloroethene	0.228	0.213	-	6.6	20	98	0
Carbon disulfide	0.7	0.69	-	1.4	20	104	0
Freon-113	0.246	0.239	-	2.8	20	101	0
Acrolein	0.041	0.041	-	0	20	111	0
Methylene chloride	0.247	0.245	-	0.8	20	105	0
Acetone	0.077	0.078	-	-1.3	20	110	0
trans-1,2-Dichloroethene	0.247	0.235	-	4.9	20	98	0
Methyl acetate	0.167	0.178	-	-6.6	20	115	0
Methyl tert-butyl ether	0.682	0.604	-	11.4	20	93	0
tert-Butyl alcohol	0.026	0.022	-	15.4	20	78	0
Diisopropyl ether	0.875	0.89	-	-1.7	20	107	0
1,1-Dichloroethane	0.492	0.497	-	-1	20	106	0
Halothane	0.201	0.201	-	0	20	103	0
Acrylonitrile	0.082	0.084	-	-2.4	20	106	0
Ethyl tert-butyl ether	0.785	0.707	-	9.9	20	96	0
Vinyl acetate	0.688	0.579	-	15.8	20	90	0
cis-1,2-Dichloroethene	0.272	0.258	-	5.1	20	99	0
2,2-Dichloropropane	0.423	0.4	-	5.4	20	101	0
Bromochloromethane	0.122	0.122	-	0	20	101	0
Cyclohexane	0.51	0.507	-	0.6	20	105	0
Chloroform	0.462	0.435	-	5.8	20	101	0
Ethyl acetate	0.269	0.258	-	4.1	20	100	0
Carbon tetrachloride	0.363	0.365	-	-0.6	20	102	0
Tetrahydrofuran	0.095	0.097	-	-2.1	20	104	0
Dibromofluoromethane	0.264	0.277	-	-4.9	20	109	0
1,1,1-Trichloroethane	0.408	0.41	-	-0.5	20	105	0
2-Butanone	0.121	0.1	-	17.4	20	89	0
1,1-Dichloropropene	0.335	0.311	-	7.2	20	96	0
Benzene	1.011	0.968	-	4.3	20	102	0
tert-Amyl methyl ether	0.688	0.563	-	18.2	20	85	0
1,2-Dichloroethane-d4	0.324	0.315	-	2.8	20	104	0
1,2-Dichloroethane	0.355	0.317	-	10.7	20	93	0
Methyl cyclohexane	0.47	0.435	-	7.4	20	101	0
Trichloroethene	0.271	0.258	-	4.8	20	99	0
Dibromomethane	0.153	0.139	-	9.2	20	92	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : TUFTS STREET
 Instrument ID : JACK
 Lab File ID : J250501B01
 Sample No : WG2061094-2
 Channel :

Lab Number : L2524944
 Project Number : 045163
 Calibration Date : 05/01/25 04:46
 Init. Calib. Date(s) : 02/28/25 02/28/25
 Init. Calib. Times : 05:35 08:42

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,2-Dichloropropane	0.262	0.26	-	0.8	20	97	0
2-Chloroethyl vinyl ether	0.159	0.122	-	23.3*	20	76	0
Bromodichloromethane	0.344	0.333	-	3.2	20	97	0
1,4-Dioxane	0.00217	0.00191*	-	12	20	94	0
cis-1,3-Dichloropropene	0.409	0.37	-	9.5	20	90	0
Chlorobenzene-d5	1	1	-	0	20	111	0
Toluene-d8	1.318	1.258	-	4.6	20	106	0
Toluene	0.882	0.759	-	13.9	20	96	0
4-Methyl-2-pentanone	0.125	0.097	-	22.4*	20	83	0
Tetrachloroethene	0.411	0.352	-	14.4	20	95	0
trans-1,3-Dichloropropene	0.495	0.41	-	17.2	20	88	0
Ethyl methacrylate	0.424	0.328	-	22.6*	20	81	0
1,1,2-Trichloroethane	0.262	0.23	-	12.2	20	90	0
Chlorodibromomethane	0.365	0.312	-	14.5	20	91	0
1,3-Dichloropropane	0.486	0.428	-	11.9	20	94	0
1,2-Dibromoethane	0.295	0.252	-	14.6	20	90	0
2-Hexanone	0.255	0.203	-	20.4*	20	82	0
Chlorobenzene	0.973	0.86	-	11.6	20	94	0
Ethylbenzene	1.752	1.483	-	15.4	20	93	0
1,1,1,2-Tetrachloroethane	0.357	0.31	-	13.2	20	93	0
p/m Xylene	0.685	0.595	-	13.1	20	96	0
o Xylene	0.658	0.57	-	13.4	20	95	0
Styrene	1.121	0.936	-	16.5	20	91	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	113	0
Bromoform	0.441	0.352	-	20.2*	20	83	0
Isopropylbenzene	3.009	2.559	-	15	20	93	0
4-Bromofluorobenzene	0.855	0.783	-	8.4	20	105	0
Bromobenzene	0.72	0.625	-	13.2	20	92	0
n-Propylbenzene	3.645	3.089	-	15.3	20	93	0
1,4-Dichlorobutane	0.953	0.837	-	12.2	20	96	0
1,1,2,2-Tetrachloroethane	0.7	0.558	-	20.3*	20	82	0
4-Ethyltoluene	2.97	2.601	-	12.4	20	96	0
2-Chlorotoluene	2.404	2.023	-	15.8	20	92	0
1,3,5-Trimethylbenzene	2.587	2.231	-	13.8	20	96	0
1,2,3-Trichloropropane	0.56	0.449	-	19.8	20	85	0
trans-1,4-Dichloro-2-buten	0.238	0.188	-	21*	20	82	0
4-Chlorotoluene	2.179	1.852	-	15	20	92	0
tert-Butylbenzene	2.151	1.904	-	11.5	20	98	0
1,2,4-Trimethylbenzene	2.516	2.187	-	13.1	20	95	0
sec-Butylbenzene	3.283	2.837	-	13.6	20	96	0
p-Isopropyltoluene	2.792	2.503	-	10.4	20	99	0
1,3-Dichlorobenzene	1.47	1.25	-	15	20	92	0
1,4-Dichlorobenzene	1.47	1.26	-	14.3	20	92	0

* Value outside of QC limits.

Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : TUFTS STREET
 Instrument ID : JACK
 Lab File ID : J250501B01
 Sample No : WG2061094-2
 Channel :

Lab Number : L2524944
 Project Number : 045163
 Calibration Date : 05/01/25 04:46
 Init. Calib. Date(s) : 02/28/25 02/28/25
 Init. Calib. Times : 05:35 08:42

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
p-Diethylbenzene	1.637	1.476	-	9.8	20	99	0
n-Butylbenzene	2.502	2.134	-	14.7	20	95	0
1,2-Dichlorobenzene	1.362	1.16	-	14.8	20	92	0
1,2,4,5-Tetramethylbenzene	2.513	2.13	-	15.2	20	95	0
1,2-Dibromo-3-chloropropan	0.133	0.107	-	19.5	20	86	0
1,3,5-Trichlorobenzene	1.072	0.912	-	14.9	20	94	0
Hexachlorobutadiene	0.458	0.378	-	17.5	20	96	0
1,2,4-Trichlorobenzene	0.948	0.776	-	18.1	20	91	0
Naphthalene	2.388	2.082	-	12.8	20	95	0
1,2,3-Trichlorobenzene	0.868	0.734	-	15.4	20	93	0

* Value outside of QC limits.





ANALYTICAL REPORT

Lab Number:	L2524947
Client:	GEI Consultants 400 Unicorn Park Drive Woburn, MA 01801
ATTN:	Chris Coner
Phone:	(781) 721-4000
Project Name:	TUFTS STREET
Project Number:	045163
Report Date:	05/06/25

The original project report/data package is held by Pace Analytical Services. This report/data package is paginated and should be reproduced only in its entirety. Pace Analytical Services holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2524947
Report Date: 05/06/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2524947-01	045163-MW117D	WATER	SOMERVILLE, MA	04/22/25 08:55	04/23/25
L2524947-02	045163-MW117S	WATER	SOMERVILLE, MA	04/22/25 09:30	04/23/25
L2524947-03	045163-MW117T	WATER	SOMERVILLE, MA	04/22/25 10:20	04/23/25
L2524947-04	045163-MW118S	WATER	SOMERVILLE, MA	04/22/25 11:35	04/23/25
L2524947-05	045163-MW118T	WATER	SOMERVILLE, MA	04/22/25 12:25	04/23/25

Project Name: TUFTS STREET

Lab Number: L2524947

Project Number: 045163

Report Date: 05/06/25

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES
A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	NO
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	YES
For any questions answered "No", please refer to the case narrative section on the following page(s).		

Please note that sample matrix information is located in the Sample Results section of this report.



Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2524947
Report Date: 05/06/25

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Pace Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Pace's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Pace Project Manager and made arrangements for Pace to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2524947
Report Date: 05/06/25

Case Narrative (continued)

MCP Related Narratives

Volatile Organics

In reference to question H:

L2524947-01 through -05: Initial Calibration did not meet:

Lowest Calibration Standard Minimum Response Factor: 1,4-dioxane (0.0019)

Average Response Factor: 1,4-dioxane

Verification: dichlorodifluoromethane (136%)

L2524947-01 through -05: The associated continuing calibration standard is outside the acceptance criteria for several compounds; however, it is within overall method allowances. Associated results are considered to be biased high if the %D is negative and biased low if the %D is positive. A copy of the continuing calibration standard is included as an addendum to this report.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

Melissa Sturgis Melissa Sturgis

Title: Technical Director/Representative

Date: 05/06/25

QC OUTLIER SUMMARY REPORT

Project Name: TUFTS STREET**Project Number:** 045163**Lab Number:** L2524947**Report Date:** 05/06/25

Method	Client ID (Native ID)	Lab ID	Parameter	QC Type	Recovery/RPD (%)	QC Limits (%)	Associated Samples	Data Quality Assessment
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There are no QC Outliers associated with this report.

ORGANICS

VOLATILES

Project Name: TUFTS STREET**Lab Number:** L2524947**Project Number:** 045163**Report Date:** 05/06/25**SAMPLE RESULTS**

Lab ID: L2524947-01
 Client ID: 045163-MW117D
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 08:55
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 141,8260D
 Analytical Date: 05/01/25 14:33
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2524947**Project Number:** 045163**Report Date:** 05/06/25**SAMPLE RESULTS**

Lab ID: L2524947-01
 Client ID: 045163-MW117D
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 08:55
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2524947**Project Number:** 045163**Report Date:** 05/06/25**SAMPLE RESULTS**

Lab ID: L2524947-01
 Client ID: 045163-MW117D
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 08:55
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	115		70-130

Project Name: TUFTS STREET**Lab Number:** L2524947**Project Number:** 045163**Report Date:** 05/06/25**SAMPLE RESULTS**

Lab ID: L2524947-02
 Client ID: 045163-MW117S
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 09:30
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 141,8260D
 Analytical Date: 05/01/25 15:00
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2524947**Project Number:** 045163**Report Date:** 05/06/25**SAMPLE RESULTS**

Lab ID: L2524947-02
 Client ID: 045163-MW117S
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 09:30
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2524947**Project Number:** 045163**Report Date:** 05/06/25**SAMPLE RESULTS**

Lab ID: L2524947-02
 Client ID: 045163-MW117S
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 09:30
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	115		70-130

Project Name: TUFTS STREET**Lab Number:** L2524947**Project Number:** 045163**Report Date:** 05/06/25**SAMPLE RESULTS**

Lab ID: L2524947-03
 Client ID: 045163-MW117T
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 10:20
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water

Analytical Method: 141,8260D

Analytical Date: 05/01/25 15:26

Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2524947**Project Number:** 045163**Report Date:** 05/06/25**SAMPLE RESULTS**

Lab ID: L2524947-03
 Client ID: 045163-MW117T
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 10:20
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2524947**Project Number:** 045163**Report Date:** 05/06/25**SAMPLE RESULTS**

Lab ID: L2524947-03
 Client ID: 045163-MW117T
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 10:20
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	120		70-130

Project Name: TUFTS STREET**Lab Number:** L2524947**Project Number:** 045163**Report Date:** 05/06/25**SAMPLE RESULTS**

Lab ID: L2524947-04
 Client ID: 045163-MW118S
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 11:35
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 141,8260D
 Analytical Date: 05/01/25 15:53
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: TUFTS STREET

Lab Number: L2524947

Project Number: 045163

Report Date: 05/06/25

SAMPLE RESULTS

Lab ID: L2524947-04
 Client ID: 045163-MW118S
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 11:35
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	11		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2524947**Project Number:** 045163**Report Date:** 05/06/25**SAMPLE RESULTS**

Lab ID: L2524947-04
 Client ID: 045163-MW118S
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 11:35
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	117		70-130

Project Name: TUFTS STREET**Lab Number:** L2524947**Project Number:** 045163**Report Date:** 05/06/25**SAMPLE RESULTS**

Lab ID: L2524947-05
 Client ID: 045163-MW118T
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 12:25
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water

Analytical Method: 141,8260D

Analytical Date: 05/02/25 10:20

Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	7.3		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2524947**Project Number:** 045163**Report Date:** 05/06/25**SAMPLE RESULTS**

Lab ID: L2524947-05
 Client ID: 045163-MW118T
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 12:25
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	2.5		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: TUFTS STREET**Lab Number:** L2524947**Project Number:** 045163**Report Date:** 05/06/25**SAMPLE RESULTS**

Lab ID: L2524947-05
 Client ID: 045163-MW118T
 Sample Location: SOMERVILLE, MA

Date Collected: 04/22/25 12:25
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	91		70-130
Dibromofluoromethane	119		70-130

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2524947
Report Date: 05/06/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 141,8260D
Analytical Date: 05/01/25 06:33
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-04 Batch: WG2061094-5					
Methylene chloride	ND		ug/l	2.0	--
1,1-Dichloroethane	ND		ug/l	1.0	--
Chloroform	ND		ug/l	1.0	--
Carbon tetrachloride	ND		ug/l	1.0	--
1,2-Dichloropropane	ND		ug/l	1.0	--
Dibromochloromethane	ND		ug/l	1.0	--
1,1,2-Trichloroethane	ND		ug/l	1.0	--
Tetrachloroethene	ND		ug/l	1.0	--
Chlorobenzene	ND		ug/l	1.0	--
Trichlorofluoromethane	ND		ug/l	2.0	--
1,2-Dichloroethane	ND		ug/l	1.0	--
1,1,1-Trichloroethane	ND		ug/l	1.0	--
Bromodichloromethane	ND		ug/l	1.0	--
trans-1,3-Dichloropropene	ND		ug/l	0.40	--
cis-1,3-Dichloropropene	ND		ug/l	0.40	--
1,3-Dichloropropene, Total	ND		ug/l	0.40	--
1,1-Dichloropropene	ND		ug/l	2.0	--
Bromoform	ND		ug/l	2.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--
Benzene	ND		ug/l	0.50	--
Toluene	ND		ug/l	1.0	--
Ethylbenzene	ND		ug/l	1.0	--
Chloromethane	ND		ug/l	2.0	--
Bromomethane	ND		ug/l	2.0	--
Vinyl chloride	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	2.0	--
1,1-Dichloroethene	ND		ug/l	1.0	--
trans-1,2-Dichloroethene	ND		ug/l	1.0	--
Trichloroethene	ND		ug/l	1.0	--



Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2524947
Report Date: 05/06/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 141,8260D
 Analytical Date: 05/01/25 06:33
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-04 Batch: WG2061094-5					
1,2-Dichlorobenzene	ND		ug/l	1.0	--
1,3-Dichlorobenzene	ND		ug/l	1.0	--
1,4-Dichlorobenzene	ND		ug/l	1.0	--
Methyl tert butyl ether	ND		ug/l	2.0	--
p/m-Xylene	ND		ug/l	2.0	--
o-Xylene	ND		ug/l	1.0	--
Xylenes, Total	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	1.0	--
1,2-Dichloroethene, Total	ND		ug/l	1.0	--
Dibromomethane	ND		ug/l	2.0	--
1,2,3-Trichloropropane	ND		ug/l	2.0	--
Styrene	ND		ug/l	1.0	--
Dichlorodifluoromethane	ND		ug/l	2.0	--
Acetone	ND		ug/l	5.0	--
Carbon disulfide	ND		ug/l	2.0	--
Methyl ethyl ketone	ND		ug/l	5.0	--
Methyl isobutyl ketone	ND		ug/l	5.0	--
2-Hexanone	ND		ug/l	5.0	--
Bromochloromethane	ND		ug/l	2.0	--
Tetrahydrofuran	ND		ug/l	2.0	--
2,2-Dichloropropane	ND		ug/l	2.0	--
1,2-Dibromoethane	ND		ug/l	2.0	--
1,3-Dichloropropane	ND		ug/l	2.0	--
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--
Bromobenzene	ND		ug/l	2.0	--
n-Butylbenzene	ND		ug/l	2.0	--
sec-Butylbenzene	ND		ug/l	2.0	--
tert-Butylbenzene	ND		ug/l	2.0	--
o-Chlorotoluene	ND		ug/l	2.0	--



Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2524947
Report Date: 05/06/25

Method Blank Analysis Batch Quality Control

Analytical Method: 141,8260D
Analytical Date: 05/01/25 06:33
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-04 Batch: WG2061094-5					
p-Chlorotoluene	ND		ug/l	2.0	--
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--
Hexachlorobutadiene	ND		ug/l	0.60	--
Isopropylbenzene	ND		ug/l	2.0	--
p-Isopropyltoluene	ND		ug/l	2.0	--
Naphthalene	ND		ug/l	2.0	--
n-Propylbenzene	ND		ug/l	2.0	--
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--
Diethyl ether	ND		ug/l	2.0	--
Diisopropyl Ether	ND		ug/l	2.0	--
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--
1,4-Dioxane	ND		ug/l	250	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	113		70-130

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2524947
Report Date: 05/06/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 141,8260D
 Analytical Date: 05/02/25 05:26
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 05 Batch: WG2061539-5					
Methylene chloride	ND		ug/l	2.0	--
1,1-Dichloroethane	ND		ug/l	1.0	--
Chloroform	ND		ug/l	1.0	--
Carbon tetrachloride	ND		ug/l	1.0	--
1,2-Dichloropropane	ND		ug/l	1.0	--
Dibromochloromethane	ND		ug/l	1.0	--
1,1,2-Trichloroethane	ND		ug/l	1.0	--
Tetrachloroethene	ND		ug/l	1.0	--
Chlorobenzene	ND		ug/l	1.0	--
Trichlorofluoromethane	ND		ug/l	2.0	--
1,2-Dichloroethane	ND		ug/l	1.0	--
1,1,1-Trichloroethane	ND		ug/l	1.0	--
Bromodichloromethane	ND		ug/l	1.0	--
trans-1,3-Dichloropropene	ND		ug/l	0.40	--
cis-1,3-Dichloropropene	ND		ug/l	0.40	--
1,3-Dichloropropene, Total	ND		ug/l	0.40	--
1,1-Dichloropropene	ND		ug/l	2.0	--
Bromoform	ND		ug/l	2.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--
Benzene	ND		ug/l	0.50	--
Toluene	ND		ug/l	1.0	--
Ethylbenzene	ND		ug/l	1.0	--
Chloromethane	ND		ug/l	2.0	--
Bromomethane	ND		ug/l	2.0	--
Vinyl chloride	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	2.0	--
1,1-Dichloroethene	ND		ug/l	1.0	--
trans-1,2-Dichloroethene	ND		ug/l	1.0	--
Trichloroethene	ND		ug/l	1.0	--



Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2524947
Report Date: 05/06/25

Method Blank Analysis Batch Quality Control

Analytical Method: 141,8260D
 Analytical Date: 05/02/25 05:26
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 05 Batch: WG2061539-5					
1,2-Dichlorobenzene	ND		ug/l	1.0	--
1,3-Dichlorobenzene	ND		ug/l	1.0	--
1,4-Dichlorobenzene	ND		ug/l	1.0	--
Methyl tert butyl ether	ND		ug/l	2.0	--
p/m-Xylene	ND		ug/l	2.0	--
o-Xylene	ND		ug/l	1.0	--
Xylenes, Total	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	1.0	--
1,2-Dichloroethene, Total	ND		ug/l	1.0	--
Dibromomethane	ND		ug/l	2.0	--
1,2,3-Trichloropropane	ND		ug/l	2.0	--
Styrene	ND		ug/l	1.0	--
Dichlorodifluoromethane	ND		ug/l	2.0	--
Acetone	ND		ug/l	5.0	--
Carbon disulfide	ND		ug/l	2.0	--
Methyl ethyl ketone	ND		ug/l	5.0	--
Methyl isobutyl ketone	ND		ug/l	5.0	--
2-Hexanone	ND		ug/l	5.0	--
Bromochloromethane	ND		ug/l	2.0	--
Tetrahydrofuran	ND		ug/l	2.0	--
2,2-Dichloropropane	ND		ug/l	2.0	--
1,2-Dibromoethane	ND		ug/l	2.0	--
1,3-Dichloropropane	ND		ug/l	2.0	--
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--
Bromobenzene	ND		ug/l	2.0	--
n-Butylbenzene	ND		ug/l	2.0	--
sec-Butylbenzene	ND		ug/l	2.0	--
tert-Butylbenzene	ND		ug/l	2.0	--
o-Chlorotoluene	ND		ug/l	2.0	--



Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2524947
Report Date: 05/06/25

Method Blank Analysis Batch Quality Control

Analytical Method: 141,8260D
Analytical Date: 05/02/25 05:26
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 05 Batch: WG2061539-5					
p-Chlorotoluene	ND		ug/l	2.0	--
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--
Hexachlorobutadiene	ND		ug/l	0.60	--
Isopropylbenzene	ND		ug/l	2.0	--
p-Isopropyltoluene	ND		ug/l	2.0	--
Naphthalene	ND		ug/l	2.0	--
n-Propylbenzene	ND		ug/l	2.0	--
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--
Diethyl ether	ND		ug/l	2.0	--
Diisopropyl Ether	ND		ug/l	2.0	--
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--
1,4-Dioxane	ND		ug/l	250	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	114		70-130



Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2524947

Report Date: 05/06/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-04 Batch: WG2061094-3 WG2061094-4								
Methylene chloride	99		97		70-130	2		20
1,1-Dichloroethane	100		100		70-130	0		20
Chloroform	94		97		70-130	3		20
Carbon tetrachloride	100		100		70-130	0		20
1,2-Dichloropropane	99		100		70-130	1		20
Dibromochloromethane	85		86		70-130	1		20
1,1,2-Trichloroethane	88		85		70-130	3		20
Tetrachloroethene	86		84		70-130	2		20
Chlorobenzene	88		88		70-130	0		20
Trichlorofluoromethane	96		94		70-130	2		20
1,2-Dichloroethane	89		92		70-130	3		20
1,1,1-Trichloroethane	100		100		70-130	0		20
Bromodichloromethane	97		94		70-130	3		20
trans-1,3-Dichloropropene	83		82		70-130	1		20
cis-1,3-Dichloropropene	90		91		70-130	1		20
1,1-Dichloropropene	93		94		70-130	1		20
Bromoform	80		80		70-130	0		20
1,1,2,2-Tetrachloroethane	80		83		70-130	4		20
Benzene	96		94		70-130	2		20
Toluene	86		84		70-130	2		20
Ethylbenzene	85		84		70-130	1		20
Chloromethane	120		120		70-130	0		20
Bromomethane	74		77		70-130	4		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2524947

Report Date: 05/06/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-04 Batch: WG2061094-3 WG2061094-4								
Vinyl chloride	78		77		70-130	1		20
Chloroethane	74		75		70-130	1		20
1,1-Dichloroethene	93		98		70-130	5		20
trans-1,2-Dichloroethene	95		96		70-130	1		20
Trichloroethene	95		94		70-130	1		20
1,2-Dichlorobenzene	85		86		70-130	1		20
1,3-Dichlorobenzene	85		85		70-130	0		20
1,4-Dichlorobenzene	86		86		70-130	0		20
Methyl tert butyl ether	89		89		70-130	0		20
p/m-Xylene	85		85		70-130	0		20
o-Xylene	85		85		70-130	0		20
cis-1,2-Dichloroethene	95		93		70-130	2		20
Dibromomethane	91		95		70-130	4		20
1,2,3-Trichloropropane	80		79		70-130	1		20
Styrene	85		80		70-130	6		20
Dichlorodifluoromethane	91		92		70-130	1		20
Acetone	100		90		70-130	11		20
Carbon disulfide	99		100		70-130	1		20
Methyl ethyl ketone	83		84		70-130	1		20
Methyl isobutyl ketone	78		77		70-130	1		20
2-Hexanone	79		80		70-130	1		20
Bromochloromethane	100		100		70-130	0		20
Tetrahydrofuran	100		110		70-130	10		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2524947

Report Date: 05/06/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-04 Batch: WG2061094-3 WG2061094-4								
2,2-Dichloropropane	95		96		70-130	1		20
1,2-Dibromoethane	86		87		70-130	1		20
1,3-Dichloropropane	88		85		70-130	3		20
1,1,1,2-Tetrachloroethane	87		87		70-130	0		20
Bromobenzene	87		86		70-130	1		20
n-Butylbenzene	85		86		70-130	1		20
sec-Butylbenzene	86		86		70-130	0		20
tert-Butylbenzene	88		88		70-130	0		20
o-Chlorotoluene	84		84		70-130	0		20
p-Chlorotoluene	85		85		70-130	0		20
1,2-Dibromo-3-chloropropane	81		88		70-130	8		20
Hexachlorobutadiene	82		84		70-130	2		20
Isopropylbenzene	85		85		70-130	0		20
p-Isopropyltoluene	90		90		70-130	0		20
Naphthalene	87		88		70-130	1		20
n-Propylbenzene	85		85		70-130	0		20
1,2,3-Trichlorobenzene	84		85		70-130	1		20
1,2,4-Trichlorobenzene	82		84		70-130	2		20
1,3,5-Trimethylbenzene	86		86		70-130	0		20
1,2,4-Trimethylbenzene	87		86		70-130	1		20
Diethyl ether	100		100		70-130	0		20
Diisopropyl Ether	100		99		70-130	1		20
Ethyl-Tert-Butyl-Ether	90		88		70-130	2		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2524947

Report Date: 05/06/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-04 Batch: WG2061094-3 WG2061094-4								
Tertiary-Amyl Methyl Ether	82		82		70-130	0		20
1,4-Dioxane	88		88		70-130	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	97		98		70-130
Toluene-d8	95		97		70-130
4-Bromofluorobenzene	92		92		70-130
Dibromofluoromethane	105		108		70-130

Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2524947

Report Date: 05/06/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 05 Batch: WG2061539-3 WG2061539-4								
Methylene chloride	100		110		70-130	10		20
1,1-Dichloroethane	110		110		70-130	0		20
Chloroform	100		100		70-130	0		20
Carbon tetrachloride	110		110		70-130	0		20
1,2-Dichloropropane	110		110		70-130	0		20
Dibromochloromethane	94		96		70-130	2		20
1,1,2-Trichloroethane	96		97		70-130	1		20
Tetrachloroethene	90		90		70-130	0		20
Chlorobenzene	94		96		70-130	2		20
Trichlorofluoromethane	100		99		70-130	1		20
1,2-Dichloroethane	99		100		70-130	1		20
1,1,1-Trichloroethane	110		100		70-130	10		20
Bromodichloromethane	110		110		70-130	0		20
trans-1,3-Dichloropropene	87		92		70-130	6		20
cis-1,3-Dichloropropene	97		99		70-130	2		20
1,1-Dichloropropene	98		97		70-130	1		20
Bromoform	87		92		70-130	6		20
1,1,2,2-Tetrachloroethane	89		93		70-130	4		20
Benzene	100		100		70-130	0		20
Toluene	94		92		70-130	2		20
Ethylbenzene	91		91		70-130	0		20
Chloromethane	130		130		70-130	0		20
Bromomethane	81		84		70-130	4		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2524947

Report Date: 05/06/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 05 Batch: WG2061539-3 WG2061539-4								
Vinyl chloride	87		86		70-130	1		20
Chloroethane	81		81		70-130	0		20
1,1-Dichloroethene	100		99		70-130	1		20
trans-1,2-Dichloroethene	100		100		70-130	0		20
Trichloroethene	100		98		70-130	2		20
1,2-Dichlorobenzene	92		95		70-130	3		20
1,3-Dichlorobenzene	92		94		70-130	2		20
1,4-Dichlorobenzene	92		93		70-130	1		20
Methyl tert butyl ether	96		95		70-130	1		20
p/m-Xylene	90		95		70-130	5		20
o-Xylene	90		90		70-130	0		20
cis-1,2-Dichloroethene	100		100		70-130	0		20
Dibromomethane	100		100		70-130	0		20
1,2,3-Trichloropropane	87		90		70-130	3		20
Styrene	90		90		70-130	0		20
Dichlorodifluoromethane	120		110		70-130	9		20
Acetone	96		110		70-130	14		20
Carbon disulfide	110		100		70-130	10		20
Methyl ethyl ketone	95		93		70-130	2		20
Methyl isobutyl ketone	85		88		70-130	3		20
2-Hexanone	83		87		70-130	5		20
Bromochloromethane	110		110		70-130	0		20
Tetrahydrofuran	120		120		70-130	0		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2524947

Report Date: 05/06/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 05 Batch: WG2061539-3 WG2061539-4								
2,2-Dichloropropane	100		99		70-130	1		20
1,2-Dibromoethane	96		98		70-130	2		20
1,3-Dichloropropane	94		95		70-130	1		20
1,1,1,2-Tetrachloroethane	92		95		70-130	3		20
Bromobenzene	93		95		70-130	2		20
n-Butylbenzene	92		92		70-130	0		20
sec-Butylbenzene	93		94		70-130	1		20
tert-Butylbenzene	93		94		70-130	1		20
o-Chlorotoluene	91		92		70-130	1		20
p-Chlorotoluene	91		93		70-130	2		20
1,2-Dibromo-3-chloropropane	91		90		70-130	1		20
Hexachlorobutadiene	87		89		70-130	2		20
Isopropylbenzene	91		92		70-130	1		20
p-Isopropyltoluene	95		95		70-130	0		20
Naphthalene	93		95		70-130	2		20
n-Propylbenzene	89		91		70-130	2		20
1,2,3-Trichlorobenzene	91		91		70-130	0		20
1,2,4-Trichlorobenzene	88		90		70-130	2		20
1,3,5-Trimethylbenzene	92		92		70-130	0		20
1,2,4-Trimethylbenzene	92		94		70-130	2		20
Diethyl ether	110		120		70-130	9		20
Diisopropyl Ether	110		110		70-130	0		20
Ethyl-Tert-Butyl-Ether	96		99		70-130	3		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2524947

Report Date: 05/06/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 05 Batch: WG2061539-3 WG2061539-4								
Tertiary-Amyl Methyl Ether	86		90		70-130	5		20
1,4-Dioxane	84		84		70-130	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	99		106		70-130
Toluene-d8	97		98		70-130
4-Bromofluorobenzene	90		94		70-130
Dibromofluoromethane	107		105		70-130

Project Name: TUFTS STREET**Lab Number:** L2524947**Project Number:** 045163**Report Date:** 05/06/25**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information**Cooler** **Custody Seal**

A Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2524947-01A	Vial HCl preserved	A	NA		5.6	Y	Absent		MCP-8260-21(14)
L2524947-01B	Vial HCl preserved	A	NA		5.6	Y	Absent		MCP-8260-21(14)
L2524947-01C	Vial HCl preserved	A	NA		5.6	Y	Absent		MCP-8260-21(14)
L2524947-02A	Vial HCl preserved	A	NA		5.6	Y	Absent		MCP-8260-21(14)
L2524947-02B	Vial HCl preserved	A	NA		5.6	Y	Absent		MCP-8260-21(14)
L2524947-02C	Vial HCl preserved	A	NA		5.6	Y	Absent		MCP-8260-21(14)
L2524947-03A	Vial HCl preserved	A	NA		5.6	Y	Absent		MCP-8260-21(14)
L2524947-03B	Vial HCl preserved	A	NA		5.6	Y	Absent		MCP-8260-21(14)
L2524947-03C	Vial HCl preserved	A	NA		5.6	Y	Absent		MCP-8260-21(14)
L2524947-04A	Vial HCl preserved	A	NA		5.6	Y	Absent		MCP-8260-21(14)
L2524947-04B	Vial HCl preserved	A	NA		5.6	Y	Absent		MCP-8260-21(14)
L2524947-04C	Vial HCl preserved	A	NA		5.6	Y	Absent		MCP-8260-21(14)
L2524947-05A	Vial HCl preserved	A	NA		5.6	Y	Absent		MCP-8260-21(14)
L2524947-05B	Vial HCl preserved	A	NA		5.6	Y	Absent		MCP-8260-21(14)
L2524947-05C	Vial HCl preserved	A	NA		5.6	Y	Absent		MCP-8260-21(14)

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2524947
Report Date: 05/06/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report



Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2524947
Report Date: 05/06/25

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

Report Format: Data Usability Report



Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2524947
Report Date: 05/06/25

Data Qualifiers

- ND** - Not detected at the reporting limit (RL) for the sample.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2524947
Report Date: 05/06/25

REFERENCES

- 141 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA and IIB, November 2021.

LIMITATION OF LIABILITIES

Pace Analytical Services performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Pace Analytical Services shall be to re-perform the work at it's own expense. In no event shall Pace Analytical Services be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Pace Analytical Services.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Pace Analytical Services LLCFacility: **Northeast**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

Revision 27

Published Date: 01/24/2025

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Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**EPA 624.1:** m/p-xylene, o-xylene, Naphthalene**EPA 625.1:** alpha-Terpineol**EPA 8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****SM 2540D:** TSS.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

MADEP-APH.**Nonpotable Water:** EPA RSK-175 Dissolved Gases**Biological Tissue Matrix:** EPA 3050B**Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048****EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048**Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)**

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LCHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables).**Microbiology:** SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.** **EPA 522, EPA 537.1.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1 Hg.****SM2340B**

Pace Analytical Services LLCID No.:**17873**Facility: **Northeast**

Revision 27

Department: **Quality Assurance**

Published Date: 01/24/2025

Title: **Certificate/Approval Program Summary**

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Certification IDs:**Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**

CT PH-0826, IL 200077, IN C-MA-03, KY JY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 3090, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048

ANAB/DoD L2474, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

For a complete listing of analytes and methods, please contact your Project Manager.

Method Blank Summary Form 4 Volatiles

Client : GEI Consultants
Project Name : TUFTS STREET
Lab Sample ID : WG2061094-5
Instrument ID : JACK
Matrix : WATER

Lab Number : L2524947
Project Number : 045163
Lab File ID : J250501B05
Analysis Date : 05/01/25 06:33

Client Sample No.	Lab Sample ID	Analysis Date
WG2061094-3LCS	WG2061094-3	05/01/25 04:46
WG2061094-4LCSD	WG2061094-4	05/01/25 05:13
045163-MW117D	L2524947-01	05/01/25 14:33
045163-MW117S	L2524947-02	05/01/25 15:00
045163-MW117T	L2524947-03	05/01/25 15:26
045163-MW118S	L2524947-04	05/01/25 15:53

Method Blank Summary Form 4 Volatiles

Client : GEI Consultants
Project Name : TUFTS STREET
Lab Sample ID : WG2061539-5
Instrument ID : JACK
Matrix : WATER

Lab Number : L2524947
Project Number : 045163
Lab File ID : J250502A05
Analysis Date : 05/02/25 05:26

Client Sample No.	Lab Sample ID	Analysis Date
WG2061539-3LCS	WG2061539-3	05/02/25 04:06
WG2061539-4LCSD	WG2061539-4	05/02/25 04:33
045163-MW118T	L2524947-05	05/02/25 10:20

Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : TUFTS STREET
 Instrument ID : JACK
 Lab File ID : J250501B01
 Sample No : WG2061094-2
 Channel :

Lab Number : L2524947
 Project Number : 045163
 Calibration Date : 05/01/25 04:46
 Init. Calib. Date(s) : 02/28/25 02/28/25
 Init. Calib. Times : 05:35 08:42

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	105	0
Dichlorodifluoromethane	0.28	0.254	-	9.3	20	93	0
Chloromethane	0.294	0.348	-	-18.4	20	124	0
Vinyl chloride	0.352	0.276	-	21.6*	20	80	0
Bromomethane	0.178	0.131	-	26.4*	20	80	0
Chloroethane	0.189	0.139	-	26.5*	20	75	0
Trichlorofluoromethane	0.411	0.392	-	4.6	20	96	0
Ethyl ether	0.116	0.117	-	-0.9	20	104	0
1,1-Dichloroethene	0.228	0.213	-	6.6	20	98	0
Carbon disulfide	0.7	0.69	-	1.4	20	104	0
Freon-113	0.246	0.239	-	2.8	20	101	0
Acrolein	0.041	0.041	-	0	20	111	0
Methylene chloride	0.247	0.245	-	0.8	20	105	0
Acetone	0.077	0.078	-	-1.3	20	110	0
trans-1,2-Dichloroethene	0.247	0.235	-	4.9	20	98	0
Methyl acetate	0.167	0.178	-	-6.6	20	115	0
Methyl tert-butyl ether	0.682	0.604	-	11.4	20	93	0
tert-Butyl alcohol	0.026	0.022	-	15.4	20	78	0
Diisopropyl ether	0.875	0.89	-	-1.7	20	107	0
1,1-Dichloroethane	0.492	0.497	-	-1	20	106	0
Halothane	0.201	0.201	-	0	20	103	0
Acrylonitrile	0.082	0.084	-	-2.4	20	106	0
Ethyl tert-butyl ether	0.785	0.707	-	9.9	20	96	0
Vinyl acetate	0.688	0.579	-	15.8	20	90	0
cis-1,2-Dichloroethene	0.272	0.258	-	5.1	20	99	0
2,2-Dichloropropane	0.423	0.4	-	5.4	20	101	0
Bromochloromethane	0.122	0.122	-	0	20	101	0
Cyclohexane	0.51	0.507	-	0.6	20	105	0
Chloroform	0.462	0.435	-	5.8	20	101	0
Ethyl acetate	0.269	0.258	-	4.1	20	100	0
Carbon tetrachloride	0.363	0.365	-	-0.6	20	102	0
Tetrahydrofuran	0.095	0.097	-	-2.1	20	104	0
Dibromofluoromethane	0.264	0.277	-	-4.9	20	109	0
1,1,1-Trichloroethane	0.408	0.41	-	-0.5	20	105	0
2-Butanone	0.121	0.1	-	17.4	20	89	0
1,1-Dichloropropene	0.335	0.311	-	7.2	20	96	0
Benzene	1.011	0.968	-	4.3	20	102	0
tert-Amyl methyl ether	0.688	0.563	-	18.2	20	85	0
1,2-Dichloroethane-d4	0.324	0.315	-	2.8	20	104	0
1,2-Dichloroethane	0.355	0.317	-	10.7	20	93	0
Methyl cyclohexane	0.47	0.435	-	7.4	20	101	0
Trichloroethene	0.271	0.258	-	4.8	20	99	0
Dibromomethane	0.153	0.139	-	9.2	20	92	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : TUFTS STREET
 Instrument ID : JACK
 Lab File ID : J250501B01
 Sample No : WG2061094-2
 Channel :

Lab Number : L2524947
 Project Number : 045163
 Calibration Date : 05/01/25 04:46
 Init. Calib. Date(s) : 02/28/25 02/28/25
 Init. Calib. Times : 05:35 08:42

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,2-Dichloropropane	0.262	0.26	-	0.8	20	97	0
2-Chloroethyl vinyl ether	0.159	0.122	-	23.3*	20	76	0
Bromodichloromethane	0.344	0.333	-	3.2	20	97	0
1,4-Dioxane	0.00217	0.00191*	-	12	20	94	0
cis-1,3-Dichloropropene	0.409	0.37	-	9.5	20	90	0
Chlorobenzene-d5	1	1	-	0	20	111	0
Toluene-d8	1.318	1.258	-	4.6	20	106	0
Toluene	0.882	0.759	-	13.9	20	96	0
4-Methyl-2-pentanone	0.125	0.097	-	22.4*	20	83	0
Tetrachloroethene	0.411	0.352	-	14.4	20	95	0
trans-1,3-Dichloropropene	0.495	0.41	-	17.2	20	88	0
Ethyl methacrylate	0.424	0.328	-	22.6*	20	81	0
1,1,2-Trichloroethane	0.262	0.23	-	12.2	20	90	0
Chlorodibromomethane	0.365	0.312	-	14.5	20	91	0
1,3-Dichloropropane	0.486	0.428	-	11.9	20	94	0
1,2-Dibromoethane	0.295	0.252	-	14.6	20	90	0
2-Hexanone	0.255	0.203	-	20.4*	20	82	0
Chlorobenzene	0.973	0.86	-	11.6	20	94	0
Ethylbenzene	1.752	1.483	-	15.4	20	93	0
1,1,1,2-Tetrachloroethane	0.357	0.31	-	13.2	20	93	0
p/m Xylene	0.685	0.595	-	13.1	20	96	0
o Xylene	0.658	0.57	-	13.4	20	95	0
Styrene	1.121	0.936	-	16.5	20	91	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	113	0
Bromoform	0.441	0.352	-	20.2*	20	83	0
Isopropylbenzene	3.009	2.559	-	15	20	93	0
4-Bromofluorobenzene	0.855	0.783	-	8.4	20	105	0
Bromobenzene	0.72	0.625	-	13.2	20	92	0
n-Propylbenzene	3.645	3.089	-	15.3	20	93	0
1,4-Dichlorobutane	0.953	0.837	-	12.2	20	96	0
1,1,2,2-Tetrachloroethane	0.7	0.558	-	20.3*	20	82	0
4-Ethyltoluene	2.97	2.601	-	12.4	20	96	0
2-Chlorotoluene	2.404	2.023	-	15.8	20	92	0
1,3,5-Trimethylbenzene	2.587	2.231	-	13.8	20	96	0
1,2,3-Trichloropropane	0.56	0.449	-	19.8	20	85	0
trans-1,4-Dichloro-2-buten	0.238	0.188	-	21*	20	82	0
4-Chlorotoluene	2.179	1.852	-	15	20	92	0
tert-Butylbenzene	2.151	1.904	-	11.5	20	98	0
1,2,4-Trimethylbenzene	2.516	2.187	-	13.1	20	95	0
sec-Butylbenzene	3.283	2.837	-	13.6	20	96	0
p-Isopropyltoluene	2.792	2.503	-	10.4	20	99	0
1,3-Dichlorobenzene	1.47	1.25	-	15	20	92	0
1,4-Dichlorobenzene	1.47	1.26	-	14.3	20	92	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : TUFTS STREET
 Instrument ID : JACK
 Lab File ID : J250501B01
 Sample No : WG2061094-2
 Channel :

Lab Number : L2524947
 Project Number : 045163
 Calibration Date : 05/01/25 04:46
 Init. Calib. Date(s) : 02/28/25 02/28/25
 Init. Calib. Times : 05:35 08:42

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
p-Diethylbenzene	1.637	1.476	-	9.8	20	99	0
n-Butylbenzene	2.502	2.134	-	14.7	20	95	0
1,2-Dichlorobenzene	1.362	1.16	-	14.8	20	92	0
1,2,4,5-Tetramethylbenzene	2.513	2.13	-	15.2	20	95	0
1,2-Dibromo-3-chloropropan	0.133	0.107	-	19.5	20	86	0
1,3,5-Trichlorobenzene	1.072	0.912	-	14.9	20	94	0
Hexachlorobutadiene	0.458	0.378	-	17.5	20	96	0
1,2,4-Trichlorobenzene	0.948	0.776	-	18.1	20	91	0
Naphthalene	2.388	2.082	-	12.8	20	95	0
1,2,3-Trichlorobenzene	0.868	0.734	-	15.4	20	93	0

* Value outside of QC limits.

Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : TUFTS STREET
 Instrument ID : JACK
 Lab File ID : J250502A02
 Sample No : WG2061539-2
 Channel :

Lab Number : L2524947
 Project Number : 045163
 Calibration Date : 05/02/25 04:06
 Init. Calib. Date(s) : 02/28/25 02/28/25
 Init. Calib. Times : 05:35 08:42

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	101	0
Dichlorodifluoromethane	0.28	0.33	-	-17.9	20	116	0
Chloromethane	0.294	0.377	-	-28.2*	20	129	0
Vinyl chloride	0.352	0.307	-	12.8	20	85	0
Bromomethane	0.178	0.144	-	19.1	20	84	0
Chloroethane	0.189	0.153	-	19	20	79	0
Trichlorofluoromethane	0.411	0.42	-	-2.2	20	99	0
Ethyl ether	0.116	0.132	-	-13.8	20	113	0
1,1-Dichloroethene	0.228	0.234	-	-2.6	20	103	0
Carbon disulfide	0.7	0.764	-	-9.1	20	110	0
Freon-113	0.246	0.263	-	-6.9	20	107	0
Acrolein	0.041	0.044	-	-7.3	20	116	0
Methylene chloride	0.247	0.261	-	-5.7	20	107	0
Acetone	0.077	0.074	-	3.9	20	101	0
trans-1,2-Dichloroethene	0.247	0.258	-	-4.5	20	103	0
Methyl acetate	0.167	0.201	-	-20.4*	20	125	0
Methyl tert-butyl ether	0.682	0.658	-	3.5	20	98	0
tert-Butyl alcohol	0.026	0.023	-	11.5	20	80	0
Diisopropyl ether	0.875	0.939	-	-7.3	20	109	0
1,1-Dichloroethane	0.492	0.534	-	-8.5	20	109	0
Halothane	0.201	0.205	-	-2	20	101	0
Acrylonitrile	0.082	0.1	-	-22*	20	122	0
Ethyl tert-butyl ether	0.785	0.753	-	4.1	20	98	0
Vinyl acetate	0.688	0.642	-	6.7	20	96	0
cis-1,2-Dichloroethene	0.272	0.281	-	-3.3	20	104	0
2,2-Dichloropropane	0.423	0.431	-	-1.9	20	104	0
Bromochloromethane	0.122	0.135	-	-10.7	20	107	0
Cyclohexane	0.51	0.541	-	-6.1	20	108	0
Chloroform	0.462	0.475	-	-2.8	20	106	0
Ethyl acetate	0.269	0.271	-	-0.7	20	101	0
Carbon tetrachloride	0.363	0.402	-	-10.7	20	109	0
Tetrahydrofuran	0.095	0.115	-	-21.1*	20	119	-.01
Dibromofluoromethane	0.264	0.283	-	-7.2	20	107	0
1,1,1-Trichloroethane	0.408	0.438	-	-7.4	20	108	0
2-Butanone	0.121	0.115	-	5	20	98	0
1,1-Dichloropropene	0.335	0.329	-	1.8	20	97	0
Benzene	1.011	1.033	-	-2.2	20	104	0
tert-Amyl methyl ether	0.688	0.594	-	13.7	20	86	0
1,2-Dichloroethane-d4	0.324	0.322	-	0.6	20	102	0
1,2-Dichloroethane	0.355	0.353	-	0.6	20	100	0
Methyl cyclohexane	0.47	0.456	-	3	20	101	0
Trichloroethene	0.271	0.275	-	-1.5	20	101	0
Dibromomethane	0.153	0.155	-	-1.3	20	99	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : TUFTS STREET
 Instrument ID : JACK
 Lab File ID : J250502A02
 Sample No : WG2061539-2
 Channel :

Lab Number : L2524947
 Project Number : 045163
 Calibration Date : 05/02/25 04:06
 Init. Calib. Date(s) : 02/28/25 02/28/25
 Init. Calib. Times : 05:35 08:42

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,2-Dichloropropane	0.262	0.282	-	-7.6	20	101	0
2-Chloroethyl vinyl ether	0.159	0.132	-	17	20	78	0
Bromodichloromethane	0.344	0.377	-	-9.6	20	106	0
1,4-Dioxane	0.00217	0.00183*	-	15.7	20	87	0
cis-1,3-Dichloropropene	0.409	0.397	-	2.9	20	93	0
Chlorobenzene-d5	1	1	-	0	20	106	0
Toluene-d8	1.318	1.278	-	3	20	103	0
Toluene	0.882	0.831	-	5.8	20	100	0
4-Methyl-2-pentanone	0.125	0.107	-	14.4	20	87	0
Tetrachloroethene	0.411	0.372	-	9.5	20	96	0
trans-1,3-Dichloropropene	0.495	0.43	-	13.1	20	88	0
Ethyl methacrylate	0.424	0.357	-	15.8	20	84	0
1,1,2-Trichloroethane	0.262	0.251	-	4.2	20	94	0
Chlorodibromomethane	0.365	0.344	-	5.8	20	95	0
1,3-Dichloropropane	0.486	0.455	-	6.4	20	96	0
1,2-Dibromoethane	0.295	0.284	-	3.7	20	96	0
2-Hexanone	0.255	0.213	-	16.5	20	82	0
Chlorobenzene	0.973	0.911	-	6.4	20	95	0
Ethylbenzene	1.752	1.59	-	9.2	20	95	0
1,1,1,2-Tetrachloroethane	0.357	0.329	-	7.8	20	94	0
p/m Xylene	0.685	0.635	-	7.3	20	98	0
o Xylene	0.658	0.6	-	8.8	20	95	0
Styrene	1.121	1.005	-	10.3	20	93	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	109	0
Bromoform	0.441	0.386	-	12.5	20	88	0
Isopropylbenzene	3.009	2.745	-	8.8	20	97	0
4-Bromofluorobenzene	0.855	0.768	-	10.2	20	99	0
Bromobenzene	0.72	0.671	-	6.8	20	95	0
n-Propylbenzene	3.645	3.254	-	10.7	20	95	0
1,4-Dichlorobutane	0.953	0.908	-	4.7	20	101	0
1,1,2,2-Tetrachloroethane	0.7	0.626	-	10.6	20	89	0
4-Ethyltoluene	2.97	2.757	-	7.2	20	99	0
2-Chlorotoluene	2.404	2.179	-	9.4	20	96	0
1,3,5-Trimethylbenzene	2.587	2.381	-	8	20	99	0
1,2,3-Trichloropropane	0.56	0.489	-	12.7	20	89	0
trans-1,4-Dichloro-2-buten	0.238	0.206	-	13.4	20	87	0
4-Chlorotoluene	2.179	1.982	-	9	20	95	0
tert-Butylbenzene	2.151	1.998	-	7.1	20	100	0
1,2,4-Trimethylbenzene	2.516	2.304	-	8.4	20	97	0
sec-Butylbenzene	3.283	3.045	-	7.2	20	100	0
p-Isopropyltoluene	2.792	2.644	-	5.3	20	101	0
1,3-Dichlorobenzene	1.47	1.351	-	8.1	20	96	0
1,4-Dichlorobenzene	1.47	1.357	-	7.7	20	96	0

* Value outside of QC limits.

Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : TUFTS STREET
 Instrument ID : JACK
 Lab File ID : J250502A02
 Sample No : WG2061539-2
 Channel :

Lab Number : L2524947
 Project Number : 045163
 Calibration Date : 05/02/25 04:06
 Init. Calib. Date(s) : 02/28/25 02/28/25
 Init. Calib. Times : 05:35 08:42

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
p-Diethylbenzene	1.637	1.566	-	4.3	20	102	0
n-Butylbenzene	2.502	2.314	-	7.5	20	100	0
1,2-Dichlorobenzene	1.362	1.251	-	8.1	20	96	0
1,2,4,5-Tetramethylbenzene	2.513	2.263	-	9.9	20	98	0
1,2-Dibromo-3-chloropropan	0.133	0.121	-	9	20	94	0
1,3,5-Trichlorobenzene	1.072	0.954	-	11	20	95	0
Hexachlorobutadiene	0.458	0.4	-	12.7	20	98	0
1,2,4-Trichlorobenzene	0.948	0.834	-	12	20	95	0
Naphthalene	2.388	2.221	-	7	20	98	0
1,2,3-Trichlorobenzene	0.868	0.79	-	9	20	96	0

* Value outside of QC limits.



ANALYTICAL REPORT

Lab Number:	L2525102
Client:	GEI Consultants 400 Unicorn Park Drive Woburn, MA 01801
ATTN:	Chris Coner
Phone:	(781) 721-4000
Project Name:	50 TUFTS STREET
Project Number:	045163
Report Date:	05/13/25

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: 50 TUFTS STREET**Project Number:** 045163**Lab Number:** L2525102**Report Date:** 05/13/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2525102-01	045163-MW202	WATER	SOMERVILLE, MASSACHUSETTS	04/23/25 09:30	04/23/25
L2525102-02	045163-MW201	WATER	SOMERVILLE, MASSACHUSETTS	04/23/25 10:15	04/23/25
L2525102-03	045163-GEO-1	WATER	SOMERVILLE, MASSACHUSETTS	04/23/25 11:30	04/23/25
L2525102-04	045163-GEO-2	WATER	SOMERVILLE, MASSACHUSETTS	04/23/25 12:50	04/23/25
L2525102-05	045163-MW901	WATER	SOMERVILLE, MASSACHUSETTS	04/23/25 12:00	04/23/25
L2525102-06	045163-MW301	WATER	SOMERVILLE, MASSACHUSETTS	04/23/25 12:10	04/23/25
L2525102-07	045163-MW104R	WATER	SOMERVILLE, MASSACHUSETTS	04/23/25 13:50	04/23/25

Project Name: 50 TUFTS STREET

Lab Number: L2525102

Project Number: 045163

Report Date: 05/13/25

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES
A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	NO
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	NO
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	NO
For any questions answered "No", please refer to the case narrative section on the following page(s).		

Please note that sample matrix information is located in the Sample Results section of this report.



Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2525102
Report Date: 05/13/25

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Pace Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Pace's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Pace Project Manager and made arrangements for Pace to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2525102
Report Date: 05/13/25

Case Narrative (continued)

Report Submission

The analysis of Sulfide was subcontracted. A copy of the laboratory report is included as an addendum. Please note: This data is only available in PDF format and is not available on Data Merger.

MCP Related Narratives

Volatile Organics

L2525102-07D2: A copy of the continuing calibration standard is included as an addendum to this report.

In reference to question G:

L2525102-07D: One or more of the target analytes did not achieve the requested CAM reporting limits.

In reference to question H:

L2525102-01, -02, -03, -04, -05, -06, and -07D: Initial Calibration did not meet:

Lowest Calibration Standard Minimum Response Factor: bromodichloromethane (0.2792), 1,4-dioxane (0.0007), cis-1,3-dichloropropene (0.2482), trans-1,3-dichloropropene (0.2759)

Average Response: bromodichloromethane, 1,4-dioxane, cis-1,3-dichloropropene, trans-1,3-dichloropropene, 1,1,2-trichloroethane

L2525102-01, -02, -03, -04, -05, -06, and -07D: The associated continuing calibration standard is outside the acceptance criteria for several compounds; however, it is within overall method allowances. Associated results are considered to be biased high if the %D is negative and biased low if the %D is positive. A copy of the continuing calibration standard is included as an addendum to this report.

Total Metals

In reference to question I:

All samples were analyzed for a subset of MCP analytes per client request.

Non-MCP Related Narratives

Total Organic Carbon

WG2060942: A second Matrix Spike and Laboratory Duplicate were prepared with the sample batch, however,

Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2525102
Report Date: 05/13/25

Case Narrative (continued)

the native sample was not available for reporting and the QC results could not be reported.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  **Kelly O'Neill**

Title: Technical Director/Representative

Date: 05/13/25

QC OUTLIER SUMMARY REPORT

Project Name: 50 TUFTS STREET**Project Number:** 045163**Lab Number:** L2525102**Report Date:** 05/13/25

Method	Client ID (Native ID)	Lab ID	Parameter	QC Type	Recovery/RPD (%)	QC Limits (%)	Associated Samples	Data Quality Assessment
MCP Volatile Organics - Westborough Lab								
8260D	Batch QC (L2525102-03)	WG2060460-6	Trichlorofluoromethane	MS	140	70-130	01-07	potential high bias
8260D	Batch QC (L2525102-03)	WG2060460-7	Tetrachloroethene	MSD	140	70-130	01-07	potential high bias
8260D	Batch QC (L2525102-03)	WG2060460-7	Trichlorofluoromethane	MSD	140	70-130	01-07	potential high bias
8260D	Batch QC (L2525102-03)	WG2060460-7	Bromomethane	MSD	23	20	01-07	non-directional bias
8260D	Batch QC (L2525102-03)	WG2060460-7	1,4-Dioxane	MSD	134	70-130	01-07	potential high bias

ORGANICS

VOLATILES

Project Name: 50 TUFTS STREET**Lab Number:** L2525102**Project Number:** 045163**Report Date:** 05/13/25**SAMPLE RESULTS**

Lab ID: L2525102-01
 Client ID: 045163-MW202
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/23/25 09:30
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water

Analytical Method: 141,8260D

Analytical Date: 04/29/25 07:02

Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	13		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	1.5		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: 50 TUFTS STREET**Lab Number:** L2525102**Project Number:** 045163**Report Date:** 05/13/25**SAMPLE RESULTS**

Lab ID: L2525102-01
 Client ID: 045163-MW202
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/23/25 09:30
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: 50 TUFTS STREET**Lab Number:** L2525102**Project Number:** 045163**Report Date:** 05/13/25**SAMPLE RESULTS****Lab ID:** L2525102-01**Date Collected:** 04/23/25 09:30**Client ID:** 045163-MW202**Date Received:** 04/23/25**Sample Location:** SOMERVILLE, MASSACHUSETTS**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	122		70-130
Toluene-d8	90		70-130
4-Bromofluorobenzene	85		70-130
Dibromofluoromethane	102		70-130

Project Name: 50 TUFTS STREET**Lab Number:** L2525102**Project Number:** 045163**Report Date:** 05/13/25**SAMPLE RESULTS**

Lab ID: L2525102-02
 Client ID: 045163-MW201
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/23/25 10:15
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water

Analytical Method: 141,8260D

Analytical Date: 04/29/25 07:25

Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	9.0		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	2.7		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: 50 TUFTS STREET**Lab Number:** L2525102**Project Number:** 045163**Report Date:** 05/13/25**SAMPLE RESULTS**

Lab ID: L2525102-02
 Client ID: 045163-MW201
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/23/25 10:15
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	2.5		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: 50 TUFTS STREET**Lab Number:** L2525102**Project Number:** 045163**Report Date:** 05/13/25**SAMPLE RESULTS****Lab ID:** L2525102-02**Date Collected:** 04/23/25 10:15**Client ID:** 045163-MW201**Date Received:** 04/23/25**Sample Location:** SOMERVILLE, MASSACHUSETTS**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	122		70-130
Toluene-d8	90		70-130
4-Bromofluorobenzene	85		70-130
Dibromofluoromethane	103		70-130

Project Name: 50 TUFTS STREET**Lab Number:** L2525102**Project Number:** 045163**Report Date:** 05/13/25**SAMPLE RESULTS**

Lab ID: L2525102-03
 Client ID: 045163-GEO-1
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/23/25 11:30
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 141,8260D
 Analytical Date: 04/29/25 06:39
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	33		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	1.3		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: 50 TUFTS STREET**Lab Number:** L2525102**Project Number:** 045163**Report Date:** 05/13/25**SAMPLE RESULTS**

Lab ID: L2525102-03
 Client ID: 045163-GEO-1
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/23/25 11:30
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	3.1		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: 50 TUFTS STREET**Lab Number:** L2525102**Project Number:** 045163**Report Date:** 05/13/25**SAMPLE RESULTS****Lab ID:** L2525102-03**Date Collected:** 04/23/25 11:30**Client ID:** 045163-GEO-1**Date Received:** 04/23/25**Sample Location:** SOMERVILLE, MASSACHUSETTS**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	119		70-130
Toluene-d8	89		70-130
4-Bromofluorobenzene	85		70-130
Dibromofluoromethane	98		70-130

Project Name: 50 TUFTS STREET**Lab Number:** L2525102**Project Number:** 045163**Report Date:** 05/13/25**SAMPLE RESULTS**

Lab ID: L2525102-04
 Client ID: 045163-GEO-2
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/23/25 12:50
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water

Analytical Method: 117,-

Analytical Date: 04/30/25 02:35

Analyst: APR

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Air Lab							
Methane	ND		ug/l	5.00	--	1	A
Ethene	ND		ug/l	3.00	--	1	A
Ethane	ND		ug/l	3.00	--	1	A

Project Name: 50 TUFTS STREET**Lab Number:** L2525102**Project Number:** 045163**Report Date:** 05/13/25**SAMPLE RESULTS**

Lab ID: L2525102-04
 Client ID: 045163-GEO-2
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/23/25 12:50
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 141,8260D
 Analytical Date: 04/29/25 07:48
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	34		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	2.3		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: 50 TUFTS STREET**Lab Number:** L2525102**Project Number:** 045163**Report Date:** 05/13/25**SAMPLE RESULTS**

Lab ID: L2525102-04
 Client ID: 045163-GEO-2
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/23/25 12:50
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	4.6		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: 50 TUFTS STREET**Lab Number:** L2525102**Project Number:** 045163**Report Date:** 05/13/25**SAMPLE RESULTS****Lab ID:** L2525102-04**Date Collected:** 04/23/25 12:50**Client ID:** 045163-GEO-2**Date Received:** 04/23/25**Sample Location:** SOMERVILLE, MASSACHUSETTS**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	120		70-130
Toluene-d8	89		70-130
4-Bromofluorobenzene	85		70-130
Dibromofluoromethane	102		70-130

Project Name: 50 TUFTS STREET**Lab Number:** L2525102**Project Number:** 045163**Report Date:** 05/13/25**SAMPLE RESULTS**

Lab ID: L2525102-05
 Client ID: 045163-MW901
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/23/25 12:00
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water

Analytical Method: 141,8260D

Analytical Date: 04/29/25 08:11

Analyst: RAW

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	34		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	2.2		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: 50 TUFTS STREET**Lab Number:** L2525102**Project Number:** 045163**Report Date:** 05/13/25**SAMPLE RESULTS**

Lab ID: L2525102-05
 Client ID: 045163-MW901
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/23/25 12:00
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	4.7		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: 50 TUFTS STREET**Lab Number:** L2525102**Project Number:** 045163**Report Date:** 05/13/25**SAMPLE RESULTS****Lab ID:** L2525102-05**Date Collected:** 04/23/25 12:00**Client ID:** 045163-MW901**Date Received:** 04/23/25**Sample Location:** SOMERVILLE, MASSACHUSETTS**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	123		70-130
Toluene-d8	87		70-130
4-Bromofluorobenzene	85		70-130
Dibromofluoromethane	103		70-130

Project Name: 50 TUFTS STREET**Lab Number:** L2525102**Project Number:** 045163**Report Date:** 05/13/25**SAMPLE RESULTS**

Lab ID: L2525102-06
 Client ID: 045163-MW301
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/23/25 12:10
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 141,8260D
 Analytical Date: 04/29/25 08:34
 Analyst: RAW

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: 50 TUFTS STREET**Lab Number:** L2525102**Project Number:** 045163**Report Date:** 05/13/25**SAMPLE RESULTS**

Lab ID: L2525102-06
 Client ID: 045163-MW301
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/23/25 12:10
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	2.0		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: 50 TUFTS STREET**Lab Number:** L2525102**Project Number:** 045163**Report Date:** 05/13/25**SAMPLE RESULTS****Lab ID:** L2525102-06**Date Collected:** 04/23/25 12:10**Client ID:** 045163-MW301**Date Received:** 04/23/25**Sample Location:** SOMERVILLE, MASSACHUSETTS**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	123		70-130
Toluene-d8	89		70-130
4-Bromofluorobenzene	84		70-130
Dibromofluoromethane	105		70-130

Project Name: 50 TUFTS STREET**Project Number:** 045163**Lab Number:** L2525102**Report Date:** 05/13/25**SAMPLE RESULTS**

Lab ID: L2525102-07

Client ID: 045163-MW104R

Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/23/25 13:50

Date Received: 04/23/25

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Analytical Method: 117,-

Analytical Date: 04/30/25 02:54

Analyst: APR

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Air Lab							
Methane	5.02		ug/l	5.00	--	1	A
Ethene	ND		ug/l	3.00	--	1	A
Ethane	ND		ug/l	3.00	--	1	A

Project Name: 50 TUFTS STREET**Lab Number:** L2525102**Project Number:** 045163**Report Date:** 05/13/25**SAMPLE RESULTS**

Lab ID: L2525102-07 D2
 Client ID: 045163-MW104R
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/23/25 13:50
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water

Analytical Method: 141,8260D

Analytical Date: 05/01/25 07:26

Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Tetrachloroethene	1700		ug/l	25	--	25

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	109		70-130

Project Name: 50 TUFTS STREET**Lab Number:** L2525102**Project Number:** 045163**Report Date:** 05/13/25**SAMPLE RESULTS**

Lab ID: L2525102-07 D
 Client ID: 045163-MW104R
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/23/25 13:50
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water

Analytical Method: 141,8260D

Analytical Date: 04/29/25 08:57

Analyst: RAW

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	10	--	5
1,1-Dichloroethane	ND		ug/l	5.0	--	5
Chloroform	ND		ug/l	5.0	--	5
Carbon tetrachloride	ND		ug/l	5.0	--	5
1,2-Dichloropropane	ND		ug/l	5.0	--	5
Dibromochloromethane	ND		ug/l	5.0	--	5
1,1,2-Trichloroethane	ND		ug/l	5.0	--	5
Tetrachloroethene	1600	E	ug/l	5.0	--	5
Chlorobenzene	ND		ug/l	5.0	--	5
Trichlorofluoromethane	ND		ug/l	10	--	5
1,2-Dichloroethane	ND		ug/l	5.0	--	5
1,1,1-Trichloroethane	ND		ug/l	5.0	--	5
Bromodichloromethane	ND		ug/l	5.0	--	5
trans-1,3-Dichloropropene	ND		ug/l	2.0	--	5
cis-1,3-Dichloropropene	ND		ug/l	2.0	--	5
1,3-Dichloropropene, Total	ND		ug/l	2.0	--	5
1,1-Dichloropropene	ND		ug/l	10	--	5
Bromoform	ND		ug/l	10	--	5
1,1,2,2-Tetrachloroethane	ND		ug/l	5.0	--	5
Benzene	ND		ug/l	2.5	--	5
Toluene	ND		ug/l	5.0	--	5
Ethylbenzene	ND		ug/l	5.0	--	5
Chloromethane	ND		ug/l	10	--	5
Bromomethane	ND		ug/l	10	--	5
Vinyl chloride	ND		ug/l	5.0	--	5
Chloroethane	ND		ug/l	10	--	5
1,1-Dichloroethene	ND		ug/l	5.0	--	5
trans-1,2-Dichloroethene	ND		ug/l	5.0	--	5



Project Name: 50 TUFTS STREET**Lab Number:** L2525102**Project Number:** 045163**Report Date:** 05/13/25**SAMPLE RESULTS**

Lab ID: L2525102-07 D
 Client ID: 045163-MW104R
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/23/25 13:50
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	25		ug/l	5.0	--	5
1,2-Dichlorobenzene	ND		ug/l	5.0	--	5
1,3-Dichlorobenzene	ND		ug/l	5.0	--	5
1,4-Dichlorobenzene	ND		ug/l	5.0	--	5
Methyl tert butyl ether	ND		ug/l	10	--	5
p/m-Xylene	ND		ug/l	10	--	5
o-Xylene	ND		ug/l	5.0	--	5
Xylenes, Total	ND		ug/l	5.0	--	5
cis-1,2-Dichloroethene	8.9		ug/l	5.0	--	5
1,2-Dichloroethene, Total	8.9		ug/l	5.0	--	5
Dibromomethane	ND		ug/l	10	--	5
1,2,3-Trichloropropane	ND		ug/l	10	--	5
Styrene	ND		ug/l	5.0	--	5
Dichlorodifluoromethane	ND		ug/l	10	--	5
Acetone	ND		ug/l	25	--	5
Carbon disulfide	ND		ug/l	10	--	5
Methyl ethyl ketone	ND		ug/l	25	--	5
Methyl isobutyl ketone	ND		ug/l	25	--	5
2-Hexanone	ND		ug/l	25	--	5
Bromochloromethane	ND		ug/l	10	--	5
Tetrahydrofuran	ND		ug/l	10	--	5
2,2-Dichloropropane	ND		ug/l	10	--	5
1,2-Dibromoethane	ND		ug/l	10	--	5
1,3-Dichloropropane	ND		ug/l	10	--	5
1,1,1,2-Tetrachloroethane	ND		ug/l	5.0	--	5
Bromobenzene	ND		ug/l	10	--	5
n-Butylbenzene	ND		ug/l	10	--	5
sec-Butylbenzene	ND		ug/l	10	--	5
tert-Butylbenzene	ND		ug/l	10	--	5
o-Chlorotoluene	ND		ug/l	10	--	5
p-Chlorotoluene	ND		ug/l	10	--	5
1,2-Dibromo-3-chloropropane	ND		ug/l	10	--	5
Hexachlorobutadiene	ND		ug/l	3.0	--	5
Isopropylbenzene	ND		ug/l	10	--	5
p-Isopropyltoluene	ND		ug/l	10	--	5
Naphthalene	ND		ug/l	10	--	5
n-Propylbenzene	ND		ug/l	10	--	5



Project Name: 50 TUFTS STREET**Lab Number:** L2525102**Project Number:** 045163**Report Date:** 05/13/25**SAMPLE RESULTS**

Lab ID: L2525102-07 D
 Client ID: 045163-MW104R
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/23/25 13:50
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	10	--	5
1,2,4-Trichlorobenzene	ND		ug/l	10	--	5
1,3,5-Trimethylbenzene	ND		ug/l	10	--	5
1,2,4-Trimethylbenzene	ND		ug/l	10	--	5
Diethyl ether	ND		ug/l	10	--	5
Diisopropyl Ether	ND		ug/l	10	--	5
Ethyl-Tert-Butyl-Ether	ND		ug/l	10	--	5
Tertiary-Amyl Methyl Ether	ND		ug/l	10	--	5
1,4-Dioxane	ND		ug/l	1200	--	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	121		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	83		70-130
Dibromofluoromethane	102		70-130

Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2525102
Report Date: 05/13/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 117,-
Analytical Date: 04/29/25 21:00
Analyst: APR

Parameter	Result	Qualifier	Units	RL	MDL
Dissolved Gases by GC - Mansfield Air Lab for sample(s): 04,07 Batch: WG2060228-3					
Methane	ND		ug/l	5.00	-- A
Ethene	ND		ug/l	3.00	-- A
Ethane	ND		ug/l	3.00	-- A

Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2525102
Report Date: 05/13/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 141,8260D
 Analytical Date: 04/29/25 06:16
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-07 Batch: WG2060460-5					
Methylene chloride	ND		ug/l	2.0	--
1,1-Dichloroethane	ND		ug/l	1.0	--
Chloroform	ND		ug/l	1.0	--
Carbon tetrachloride	ND		ug/l	1.0	--
1,2-Dichloropropane	ND		ug/l	1.0	--
Dibromochloromethane	ND		ug/l	1.0	--
1,1,2-Trichloroethane	ND		ug/l	1.0	--
Tetrachloroethene	ND		ug/l	1.0	--
Chlorobenzene	ND		ug/l	1.0	--
Trichlorofluoromethane	ND		ug/l	2.0	--
1,2-Dichloroethane	ND		ug/l	1.0	--
1,1,1-Trichloroethane	ND		ug/l	1.0	--
Bromodichloromethane	ND		ug/l	1.0	--
trans-1,3-Dichloropropene	ND		ug/l	0.40	--
cis-1,3-Dichloropropene	ND		ug/l	0.40	--
1,3-Dichloropropene, Total	ND		ug/l	0.40	--
1,1-Dichloropropene	ND		ug/l	2.0	--
Bromoform	ND		ug/l	2.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--
Benzene	ND		ug/l	0.50	--
Toluene	ND		ug/l	1.0	--
Ethylbenzene	ND		ug/l	1.0	--
Chloromethane	ND		ug/l	2.0	--
Bromomethane	ND		ug/l	2.0	--
Vinyl chloride	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	2.0	--
1,1-Dichloroethene	ND		ug/l	1.0	--
trans-1,2-Dichloroethene	ND		ug/l	1.0	--
Trichloroethene	ND		ug/l	1.0	--



Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2525102
Report Date: 05/13/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 141,8260D
 Analytical Date: 04/29/25 06:16
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-07 Batch: WG2060460-5					
1,2-Dichlorobenzene	ND		ug/l	1.0	--
1,3-Dichlorobenzene	ND		ug/l	1.0	--
1,4-Dichlorobenzene	ND		ug/l	1.0	--
Methyl tert butyl ether	ND		ug/l	2.0	--
p/m-Xylene	ND		ug/l	2.0	--
o-Xylene	ND		ug/l	1.0	--
Xylenes, Total	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	1.0	--
1,2-Dichloroethene, Total	ND		ug/l	1.0	--
Dibromomethane	ND		ug/l	2.0	--
1,2,3-Trichloropropane	ND		ug/l	2.0	--
Styrene	ND		ug/l	1.0	--
Dichlorodifluoromethane	ND		ug/l	2.0	--
Acetone	ND		ug/l	5.0	--
Carbon disulfide	ND		ug/l	2.0	--
Methyl ethyl ketone	ND		ug/l	5.0	--
Methyl isobutyl ketone	ND		ug/l	5.0	--
2-Hexanone	ND		ug/l	5.0	--
Bromochloromethane	ND		ug/l	2.0	--
Tetrahydrofuran	ND		ug/l	2.0	--
2,2-Dichloropropane	ND		ug/l	2.0	--
1,2-Dibromoethane	ND		ug/l	2.0	--
1,3-Dichloropropane	ND		ug/l	2.0	--
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--
Bromobenzene	ND		ug/l	2.0	--
n-Butylbenzene	ND		ug/l	2.0	--
sec-Butylbenzene	ND		ug/l	2.0	--
tert-Butylbenzene	ND		ug/l	2.0	--
o-Chlorotoluene	ND		ug/l	2.0	--



Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2525102
Report Date: 05/13/25

Method Blank Analysis Batch Quality Control

Analytical Method: 141,8260D
Analytical Date: 04/29/25 06:16
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-07 Batch: WG2060460-5					
p-Chlorotoluene	ND		ug/l	2.0	--
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--
Hexachlorobutadiene	ND		ug/l	0.60	--
Isopropylbenzene	ND		ug/l	2.0	--
p-Isopropyltoluene	ND		ug/l	2.0	--
Naphthalene	ND		ug/l	2.0	--
n-Propylbenzene	ND		ug/l	2.0	--
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--
Diethyl ether	ND		ug/l	2.0	--
Diisopropyl Ether	ND		ug/l	2.0	--
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--
1,4-Dioxane	ND		ug/l	250	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	90		70-130
4-Bromofluorobenzene	85		70-130
Dibromofluoromethane	97		70-130

Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2525102
Report Date: 05/13/25

Method Blank Analysis Batch Quality Control

Analytical Method: 141,8260D
 Analytical Date: 05/01/25 06:33
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 07 Batch: WG2061094-5					
Methylene chloride	ND		ug/l	2.0	--
1,1-Dichloroethane	ND		ug/l	1.0	--
Chloroform	ND		ug/l	1.0	--
Carbon tetrachloride	ND		ug/l	1.0	--
1,2-Dichloropropane	ND		ug/l	1.0	--
Dibromochloromethane	ND		ug/l	1.0	--
1,1,2-Trichloroethane	ND		ug/l	1.0	--
Tetrachloroethene	ND		ug/l	1.0	--
Chlorobenzene	ND		ug/l	1.0	--
Trichlorofluoromethane	ND		ug/l	2.0	--
1,2-Dichloroethane	ND		ug/l	1.0	--
1,1,1-Trichloroethane	ND		ug/l	1.0	--
Bromodichloromethane	ND		ug/l	1.0	--
trans-1,3-Dichloropropene	ND		ug/l	0.40	--
cis-1,3-Dichloropropene	ND		ug/l	0.40	--
1,3-Dichloropropene, Total	ND		ug/l	0.40	--
1,1-Dichloropropene	ND		ug/l	2.0	--
Bromoform	ND		ug/l	2.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--
Benzene	ND		ug/l	0.50	--
Toluene	ND		ug/l	1.0	--
Ethylbenzene	ND		ug/l	1.0	--
Chloromethane	ND		ug/l	2.0	--
Bromomethane	ND		ug/l	2.0	--
Vinyl chloride	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	2.0	--
1,1-Dichloroethene	ND		ug/l	1.0	--
trans-1,2-Dichloroethene	ND		ug/l	1.0	--
Trichloroethene	ND		ug/l	1.0	--



Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2525102
Report Date: 05/13/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 141,8260D
 Analytical Date: 05/01/25 06:33
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 07 Batch: WG2061094-5					
1,2-Dichlorobenzene	ND		ug/l	1.0	--
1,3-Dichlorobenzene	ND		ug/l	1.0	--
1,4-Dichlorobenzene	ND		ug/l	1.0	--
Methyl tert butyl ether	ND		ug/l	2.0	--
p/m-Xylene	ND		ug/l	2.0	--
o-Xylene	ND		ug/l	1.0	--
Xylenes, Total	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	1.0	--
1,2-Dichloroethene, Total	ND		ug/l	1.0	--
Dibromomethane	ND		ug/l	2.0	--
1,2,3-Trichloropropane	ND		ug/l	2.0	--
Styrene	ND		ug/l	1.0	--
Dichlorodifluoromethane	ND		ug/l	2.0	--
Acetone	ND		ug/l	5.0	--
Carbon disulfide	ND		ug/l	2.0	--
Methyl ethyl ketone	ND		ug/l	5.0	--
Methyl isobutyl ketone	ND		ug/l	5.0	--
2-Hexanone	ND		ug/l	5.0	--
Bromochloromethane	ND		ug/l	2.0	--
Tetrahydrofuran	ND		ug/l	2.0	--
2,2-Dichloropropane	ND		ug/l	2.0	--
1,2-Dibromoethane	ND		ug/l	2.0	--
1,3-Dichloropropane	ND		ug/l	2.0	--
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--
Bromobenzene	ND		ug/l	2.0	--
n-Butylbenzene	ND		ug/l	2.0	--
sec-Butylbenzene	ND		ug/l	2.0	--
tert-Butylbenzene	ND		ug/l	2.0	--
o-Chlorotoluene	ND		ug/l	2.0	--



Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2525102
Report Date: 05/13/25

Method Blank Analysis Batch Quality Control

Analytical Method: 141,8260D
Analytical Date: 05/01/25 06:33
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 07 Batch: WG2061094-5					
p-Chlorotoluene	ND		ug/l	2.0	--
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--
Hexachlorobutadiene	ND		ug/l	0.60	--
Isopropylbenzene	ND		ug/l	2.0	--
p-Isopropyltoluene	ND		ug/l	2.0	--
Naphthalene	ND		ug/l	2.0	--
n-Propylbenzene	ND		ug/l	2.0	--
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--
Diethyl ether	ND		ug/l	2.0	--
Diisopropyl Ether	ND		ug/l	2.0	--
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--
1,4-Dioxane	ND		ug/l	250	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	113		70-130



Lab Control Sample Analysis **Batch Quality Control**

Project Name: 50 TUFTS STREET

Project Number: 045163

Lab Number: L2525102

Report Date: 05/13/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Dissolved Gases by GC - Mansfield Air Lab Associated sample(s): 04,07 Batch: WG2060228-2									
Methane	107		-		80-120	-		25	A
Ethene	115		-		80-120	-		25	A
Ethane	107		-		80-120	-		25	A

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 50 TUFTS STREET

Project Number: 045163

Lab Number: L2525102

Report Date: 05/13/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-07 Batch: WG2060460-3 WG2060460-4								
Methylene chloride	110		110		70-130	0		20
1,1-Dichloroethane	88		87		70-130	1		20
Chloroform	100		100		70-130	0		20
Carbon tetrachloride	110		110		70-130	0		20
1,2-Dichloropropane	83		82		70-130	1		20
Dibromochloromethane	97		98		70-130	1		20
1,1,2-Trichloroethane	96		97		70-130	1		20
Tetrachloroethene	98		99		70-130	1		20
Chlorobenzene	91		92		70-130	1		20
Trichlorofluoromethane	130		120		70-130	8		20
1,2-Dichloroethane	100		100		70-130	0		20
1,1,1-Trichloroethane	110		110		70-130	0		20
Bromodichloromethane	100		100		70-130	0		20
trans-1,3-Dichloropropene	100		100		70-130	0		20
cis-1,3-Dichloropropene	93		96		70-130	3		20
1,1-Dichloropropene	91		93		70-130	2		20
Bromoform	89		91		70-130	2		20
1,1,2,2-Tetrachloroethane	79		82		70-130	4		20
Benzene	91		91		70-130	0		20
Toluene	95		94		70-130	1		20
Ethylbenzene	100		100		70-130	0		20
Chloromethane	75		76		70-130	1		20
Bromomethane	94		90		70-130	4		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 50 TUFTS STREET

Project Number: 045163

Lab Number: L2525102

Report Date: 05/13/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-07 Batch: WG2060460-3 WG2060460-4								
Vinyl chloride	92		92		70-130	0		20
Chloroethane	100		100		70-130	0		20
1,1-Dichloroethene	110		110		70-130	0		20
trans-1,2-Dichloroethene	100		99		70-130	1		20
Trichloroethene	99		99		70-130	0		20
1,2-Dichlorobenzene	84		87		70-130	4		20
1,3-Dichlorobenzene	86		87		70-130	1		20
1,4-Dichlorobenzene	83		85		70-130	2		20
Methyl tert butyl ether	110		110		70-130	0		20
p/m-Xylene	100		100		70-130	0		20
o-Xylene	100		100		70-130	0		20
cis-1,2-Dichloroethene	87		87		70-130	0		20
Dibromomethane	95		98		70-130	3		20
1,2,3-Trichloropropane	84		86		70-130	2		20
Styrene	105		100		70-130	5		20
Dichlorodifluoromethane	110		110		70-130	0		20
Acetone	130		120		70-130	8		20
Carbon disulfide	100		100		70-130	0		20
Methyl ethyl ketone	87		86		70-130	1		20
Methyl isobutyl ketone	75		77		70-130	3		20
2-Hexanone	81		82		70-130	1		20
Bromochloromethane	89		89		70-130	0		20
Tetrahydrofuran	79		81		70-130	3		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 50 TUFTS STREET

Project Number: 045163

Lab Number: L2525102

Report Date: 05/13/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-07 Batch: WG2060460-3 WG2060460-4								
2,2-Dichloropropane	110		110		70-130	0		20
1,2-Dibromoethane	89		91		70-130	2		20
1,3-Dichloropropane	95		96		70-130	1		20
1,1,1,2-Tetrachloroethane	100		100		70-130	0		20
Bromobenzene	85		87		70-130	2		20
n-Butylbenzene	95		96		70-130	1		20
sec-Butylbenzene	91		91		70-130	0		20
tert-Butylbenzene	84		86		70-130	2		20
o-Chlorotoluene	90		93		70-130	3		20
p-Chlorotoluene	88		90		70-130	2		20
1,2-Dibromo-3-chloropropane	89		91		70-130	2		20
Hexachlorobutadiene	99		100		70-130	1		20
Isopropylbenzene	84		85		70-130	1		20
p-Isopropyltoluene	88		90		70-130	2		20
Naphthalene	75		78		70-130	4		20
n-Propylbenzene	88		90		70-130	2		20
1,2,3-Trichlorobenzene	87		90		70-130	3		20
1,2,4-Trichlorobenzene	84		85		70-130	1		20
1,3,5-Trimethylbenzene	90		91		70-130	1		20
1,2,4-Trimethylbenzene	92		94		70-130	2		20
Diethyl ether	100		100		70-130	0		20
Diisopropyl Ether	88		88		70-130	0		20
Ethyl-Tert-Butyl-Ether	88		90		70-130	2		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 50 TUFTS STREET

Lab Number: L2525102

Project Number: 045163

Report Date: 05/13/25

Parameter	LCS %Recovery	Qual	LCS %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-07 Batch: WG2060460-3 WG2060460-4								
Tertiary-Amyl Methyl Ether	90		92		70-130	2		20
1,4-Dioxane	116		118		70-130	2		20

Surrogate	LCS %Recovery	Qual	LCS %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	107		110		70-130
Toluene-d8	92		93		70-130
4-Bromofluorobenzene	81		82		70-130
Dibromofluoromethane	92		91		70-130

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 50 TUFTS STREET

Project Number: 045163

Lab Number: L2525102

Report Date: 05/13/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 07 Batch: WG2061094-3 WG2061094-4								
Methylene chloride	99		97		70-130	2		20
1,1-Dichloroethane	100		100		70-130	0		20
Chloroform	94		97		70-130	3		20
Carbon tetrachloride	100		100		70-130	0		20
1,2-Dichloropropane	99		100		70-130	1		20
Dibromochloromethane	85		86		70-130	1		20
1,1,2-Trichloroethane	88		85		70-130	3		20
Tetrachloroethene	86		84		70-130	2		20
Chlorobenzene	88		88		70-130	0		20
Trichlorofluoromethane	96		94		70-130	2		20
1,2-Dichloroethane	89		92		70-130	3		20
1,1,1-Trichloroethane	100		100		70-130	0		20
Bromodichloromethane	97		94		70-130	3		20
trans-1,3-Dichloropropene	83		82		70-130	1		20
cis-1,3-Dichloropropene	90		91		70-130	1		20
1,1-Dichloropropene	93		94		70-130	1		20
Bromoform	80		80		70-130	0		20
1,1,2,2-Tetrachloroethane	80		83		70-130	4		20
Benzene	96		94		70-130	2		20
Toluene	86		84		70-130	2		20
Ethylbenzene	85		84		70-130	1		20
Chloromethane	120		120		70-130	0		20
Bromomethane	74		77		70-130	4		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 50 TUFTS STREET

Project Number: 045163

Lab Number: L2525102

Report Date: 05/13/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 07 Batch: WG2061094-3 WG2061094-4								
Vinyl chloride	78		77		70-130	1		20
Chloroethane	74		75		70-130	1		20
1,1-Dichloroethene	93		98		70-130	5		20
trans-1,2-Dichloroethene	95		96		70-130	1		20
Trichloroethene	95		94		70-130	1		20
1,2-Dichlorobenzene	85		86		70-130	1		20
1,3-Dichlorobenzene	85		85		70-130	0		20
1,4-Dichlorobenzene	86		86		70-130	0		20
Methyl tert butyl ether	89		89		70-130	0		20
p/m-Xylene	85		85		70-130	0		20
o-Xylene	85		85		70-130	0		20
cis-1,2-Dichloroethene	95		93		70-130	2		20
Dibromomethane	91		95		70-130	4		20
1,2,3-Trichloropropane	80		79		70-130	1		20
Styrene	85		80		70-130	6		20
Dichlorodifluoromethane	91		92		70-130	1		20
Acetone	100		90		70-130	11		20
Carbon disulfide	99		100		70-130	1		20
Methyl ethyl ketone	83		84		70-130	1		20
Methyl isobutyl ketone	78		77		70-130	1		20
2-Hexanone	79		80		70-130	1		20
Bromochloromethane	100		100		70-130	0		20
Tetrahydrofuran	100		110		70-130	10		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 50 TUFTS STREET

Project Number: 045163

Lab Number: L2525102

Report Date: 05/13/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 07 Batch: WG2061094-3 WG2061094-4								
2,2-Dichloropropane	95		96		70-130	1		20
1,2-Dibromoethane	86		87		70-130	1		20
1,3-Dichloropropane	88		85		70-130	3		20
1,1,1,2-Tetrachloroethane	87		87		70-130	0		20
Bromobenzene	87		86		70-130	1		20
n-Butylbenzene	85		86		70-130	1		20
sec-Butylbenzene	86		86		70-130	0		20
tert-Butylbenzene	88		88		70-130	0		20
o-Chlorotoluene	84		84		70-130	0		20
p-Chlorotoluene	85		85		70-130	0		20
1,2-Dibromo-3-chloropropane	81		88		70-130	8		20
Hexachlorobutadiene	82		84		70-130	2		20
Isopropylbenzene	85		85		70-130	0		20
p-Isopropyltoluene	90		90		70-130	0		20
Naphthalene	87		88		70-130	1		20
n-Propylbenzene	85		85		70-130	0		20
1,2,3-Trichlorobenzene	84		85		70-130	1		20
1,2,4-Trichlorobenzene	82		84		70-130	2		20
1,3,5-Trimethylbenzene	86		86		70-130	0		20
1,2,4-Trimethylbenzene	87		86		70-130	1		20
Diethyl ether	100		100		70-130	0		20
Diisopropyl Ether	100		99		70-130	1		20
Ethyl-Tert-Butyl-Ether	90		88		70-130	2		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 50 TUFTS STREET

Project Number: 045163

Lab Number: L2525102

Report Date: 05/13/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 07 Batch: WG2061094-3 WG2061094-4								
Tertiary-Amyl Methyl Ether	82		82		70-130	0		20
1,4-Dioxane	88		88		70-130	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	97		98		70-130
Toluene-d8	95		97		70-130
4-Bromofluorobenzene	92		92		70-130
Dibromofluoromethane	105		108		70-130

Matrix Spike Analysis

Batch Quality Control

Project Name: 50 TUFTS STREET

Project Number: 045163

Lab Number: L2525102

Report Date: 05/13/25

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-07 QC Batch ID: WG2060460-6 WG2060460-7 QC Sample: L2525102-03 Client ID: 045163-GEO-1												
Methylene chloride	ND	10	11	110		12	120		70-130	9		20
1,1-Dichloroethane	ND	10	9.5	95		9.5	95		70-130	0		20
Chloroform	ND	10	11	110		11	110		70-130	0		20
Carbon tetrachloride	ND	10	12	120		12	120		70-130	0		20
1,2-Dichloropropane	ND	10	8.4	84		8.6	86		70-130	2		20
Dibromochloromethane	ND	10	10	100		10	100		70-130	0		20
1,1,2-Trichloroethane	ND	10	10	100		10	100		70-130	0		20
Tetrachloroethene	33	10	46	130		47	140	Q	70-130	2		20
Chlorobenzene	ND	10	9.4	94		9.7	97		70-130	3		20
Trichlorofluoromethane	ND	10	14	140	Q	14	140	Q	70-130	0		20
1,2-Dichloroethane	ND	10	11	110		11	110		70-130	0		20
1,1,1-Trichloroethane	1.3	10	14	127		14	127		70-130	0		20
Bromodichloromethane	ND	10	11	110		11	110		70-130	0		20
trans-1,3-Dichloropropene	ND	10	10	100		10	100		70-130	0		20
cis-1,3-Dichloropropene	ND	10	8.4	84		8.5	85		70-130	1		20
1,1-Dichloropropene	ND	10	9.5	95		9.9	99		70-130	4		20
Bromoform	ND	10	9.2	92		9.6	96		70-130	4		20
1,1,2,2-Tetrachloroethane	ND	10	8.5	85		8.2	82		70-130	4		20
Benzene	ND	10	9.6	96		9.8	98		70-130	2		20
Toluene	ND	10	9.7	97		10	100		70-130	3		20
Ethylbenzene	ND	10	10	100		11	110		70-130	10		20
Chloromethane	ND	10	8.0	80		8.7	87		70-130	8		20
Bromomethane	ND	10	8.7	87		11	110		70-130	23	Q	20

Matrix Spike Analysis **Batch Quality Control**

Project Name: 50 TUFTS STREET

Project Number: 045163

Lab Number: L2525102

Report Date: 05/13/25

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-07 QC Batch ID: WG2060460-6 WG2060460-7 QC Sample: L2525102-03 Client ID: 045163-GEO-1												
Vinyl chloride	ND	10	9.6	96		11	110		70-130	14		20
Chloroethane	ND	10	11	110		12	120		70-130	9		20
1,1-Dichloroethene	ND	10	12	120		12	120		70-130	0		20
trans-1,2-Dichloroethene	ND	10	11	110		11	110		70-130	0		20
Trichloroethene	3.1	10	14	109		14	109		70-130	0		20
1,2-Dichlorobenzene	ND	10	8.9	89		8.9	89		70-130	0		20
1,3-Dichlorobenzene	ND	10	9.2	92		9.3	93		70-130	1		20
1,4-Dichlorobenzene	ND	10	8.8	88		8.7	87		70-130	1		20
Methyl tert butyl ether	ND	10	11	110		11	110		70-130	0		20
p/m-Xylene	ND	20	21	105		22	110		70-130	5		20
o-Xylene	ND	20	21	105		21	105		70-130	0		20
cis-1,2-Dichloroethene	ND	10	8.9	89		9.3	93		70-130	4		20
Dibromomethane	ND	10	10	100		9.7	97		70-130	3		20
1,2,3-Trichloropropane	ND	10	8.8	88		8.9	89		70-130	1		20
Styrene	ND	20	21	105		22	110		70-130	5		20
Dichlorodifluoromethane	ND	10	12	120		12	120		70-130	0		20
Acetone	ND	10	12	120		12	120		70-130	0		20
Carbon disulfide	ND	10	12	120		12	120		70-130	0		20
Methyl ethyl ketone	ND	10	8.0	80		7.9	79		70-130	1		20
Methyl isobutyl ketone	ND	10	8.0	80		7.9	79		70-130	1		20
2-Hexanone	ND	10	7.2	72		7.8	78		70-130	8		20
Bromochloromethane	ND	10	9.1	91		9.1	91		70-130	0		20
Tetrahydrofuran	ND	10	7.8	78		7.9	79		70-130	1		20

Matrix Spike Analysis

Batch Quality Control

Project Name: 50 TUFTS STREET

Project Number: 045163

Lab Number: L2525102

Report Date: 05/13/25

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-07 QC Batch ID: WG2060460-6 WG2060460-7 QC Sample: L2525102-03 Client ID: 045163-GEO-1												
2,2-Dichloropropane	ND	10	10	100		11	110		70-130	10		20
1,2-Dibromoethane	ND	10	9.3	93		9.5	95		70-130	2		20
1,3-Dichloropropane	ND	10	9.6	96		10	100		70-130	4		20
1,1,1,2-Tetrachloroethane	ND	10	10	100		11	110		70-130	10		20
Bromobenzene	ND	10	9.1	91		8.8	88		70-130	3		20
n-Butylbenzene	ND	10	10	100		10	100		70-130	0		20
sec-Butylbenzene	ND	10	9.7	97		9.8	98		70-130	1		20
tert-Butylbenzene	ND	10	8.8	88		9.1	91		70-130	3		20
o-Chlorotoluene	ND	10	9.6	96		9.6	96		70-130	0		20
p-Chlorotoluene	ND	10	9.2	92		9.3	93		70-130	1		20
1,2-Dibromo-3-chloropropane	ND	10	9.1	91		9.2	92		70-130	1		20
Hexachlorobutadiene	ND	10	11	110		11	110		70-130	0		20
Isopropylbenzene	ND	10	8.7	87		9.0	90		70-130	3		20
p-Isopropyltoluene	ND	10	9.3	93		9.5	95		70-130	2		20
Naphthalene	ND	10	7.4	74		7.6	76		70-130	3		20
n-Propylbenzene	ND	10	9.5	95		9.5	95		70-130	0		20
1,2,3-Trichlorobenzene	ND	10	8.9	89		9.0	90		70-130	1		20
1,2,4-Trichlorobenzene	ND	10	8.2	82		8.4	84		70-130	2		20
1,3,5-Trimethylbenzene	ND	10	9.4	94		9.6	96		70-130	2		20
1,2,4-Trimethylbenzene	ND	10	9.6	96		9.8	98		70-130	2		20
Diethyl ether	ND	10	10	100		11	110		70-130	10		20
Diisopropyl Ether	ND	10	8.9	89		9.0	90		70-130	1		20
Ethyl-Tert-Butyl-Ether	ND	10	8.8	88		9.0	90		70-130	2		20

Matrix Spike Analysis **Batch Quality Control**

Project Name: 50 TUFTS STREET

Lab Number: L2525102

Project Number: 045163

Report Date: 05/13/25

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-07 QC Batch ID: WG2060460-6 WG2060460-7 QC Sample: L2525102-03 Client ID: 045163-GEO-1												
Tertiary-Amyl Methyl Ether	ND	10	9.0	90		9.1	91		70-130	1		20
1,4-Dioxane	ND	500	630	126		670	134	Q	70-130	6		20

<i>Surrogate</i>	<i>MS % Recovery</i>	<i>Qualifier</i>	<i>MSD % Recovery</i>	<i>Qualifier</i>	<i>Acceptance Criteria</i>
1,2-Dichloroethane-d4	112		112		70-130
4-Bromofluorobenzene	79		80		70-130
Dibromofluoromethane	95		94		70-130
Toluene-d8	88		91		70-130

METALS

Project Name: 50 TUFTS STREET**Lab Number:** L2525102**Project Number:** 045163**Report Date:** 05/13/25**SAMPLE RESULTS**

Lab ID: L2525102-04

Date Collected: 04/23/25 12:50

Client ID: 045163-GEO-2

Date Received: 04/23/25

Sample Location: SOMERVILLE, MASSACHUSETTS

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Total Metals - Mansfield Lab											
Manganese, Total	ND		mg/l	0.0100	--	1	05/01/25 10:33	05/06/25 17:46	EPA 3005A	97,6010D	EFM



Project Name: 50 TUFTS STREET**Lab Number:** L2525102**Project Number:** 045163**Report Date:** 05/13/25**SAMPLE RESULTS**

Lab ID: L2525102-07

Date Collected: 04/23/25 13:50

Client ID: 045163-MW104R

Date Received: 04/23/25

Sample Location: SOMERVILLE, MASSACHUSETTS

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Total Metals - Mansfield Lab											
Manganese, Total	ND		mg/l	0.0100	--	1	05/01/25 10:33	05/06/25 17:51	EPA 3005A	97,6010D	EFM



Project Name: 50 TUFTS STREET

Lab Number: L2525102

Project Number: 045163

Report Date: 05/13/25

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Total Metals - Mansfield Lab for sample(s): 04,07 Batch: WG2061072-1										
Manganese, Total	ND		mg/l	0.0100	--	1	05/01/25 10:33	05/01/25 17:29	97,6010D	DMC

Prep Information

Digestion Method: EPA 3005A



Lab Control Sample Analysis **Batch Quality Control**

Project Name: 50 TUFTS STREET

Project Number: 045163

Lab Number: L2525102

Report Date: 05/13/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Total Metals - Mansfield Lab Associated sample(s): 04,07 Batch: WG2061072-2 WG2061072-3								
Manganese, Total	102		102		80-120	0		20

INORGANICS & MISCELLANEOUS

Project Name: 50 TUFTS STREET

Project Number: 045163

Lab Number: L2525102

Report Date: 05/13/25

SAMPLE RESULTS

Lab ID: L2525102-04

Client ID: 045163-GEO-2

Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/23/25 12:50

Date Received: 04/23/25

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Alkalinity, Total	40.5		mg CaCO3/L	2.00	NA	1	-	05/01/25 18:52	121,2320B	MRM
Chlorine, Total Residual	ND		mg/l	0.02	--	1	04/24/25 08:10	04/24/25 08:53	121,4500CL-G	CAR
Chloride	130		mg/l	10	--	10	-	05/03/25 06:43	1,9251	MRM
Nitrogen, Nitrate	6.95		mg/l	0.100	--	1	-	04/24/25 05:48	121,4500NO3-F	MRM
Nitrogen, Nitrate/Nitrite	7.6		mg/l	0.10	--	1	-	05/04/25 10:35	121,4500NO3-F	KAF
Total Nitrogen	7.6		mg/l	0.30	--	1	-	05/13/25 17:45	107,-	MRM
Nitrogen, Total Kjeldahl	ND		mg/l	0.300	--	1	05/09/25 08:00	05/13/25 16:45	121,4500NH3-H	AT
Sulfate	20.		mg/l	10	--	1	05/04/25 15:30	05/04/25 15:30	1,9038	MRW
Total Organic Carbon	0.79		mg/l	0.50	--	1	-	05/01/25 02:02	1,9060A	DEW
Surfactants, MBAS	ND		mg/l	0.050	--	1	04/24/25 03:00	04/24/25 06:57	121,5540C	CAR
Iron, Ferrous	ND		mg/l	0.50	--	1	-	04/23/25 21:23	121,3500FE-B	AAS



Project Name: 50 TUFTS STREET

Project Number: 045163

Lab Number: L2525102

Report Date: 05/13/25

SAMPLE RESULTS

Lab ID: L2525102-07

Client ID: 045163-MW104R

Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/23/25 13:50

Date Received: 04/23/25

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Alkalinity, Total	164.		mg CaCO3/L	2.00	NA	1	-	05/01/25 18:54	121,2320B	MRM
Chlorine, Total Residual	ND		mg/l	0.02	--	1	04/24/25 08:10	04/24/25 08:53	121,4500CL-G	CAR
Chloride	360		mg/l	10	--	10	-	05/03/25 06:45	1,9251	MRM
Nitrogen, Nitrate	2.75		mg/l	0.100	--	1	-	04/24/25 05:49	121,4500NO3-F	MRM
Nitrogen, Nitrate/Nitrite	2.9		mg/l	0.10	--	1	-	05/04/25 10:37	121,4500NO3-F	KAF
Total Nitrogen	2.9		mg/l	0.30	--	1	-	05/09/25 18:29	107,-	JRO
Nitrogen, Total Kjeldahl	ND		mg/l	0.300	--	1	05/08/25 22:10	05/09/25 10:58	121,4500NH3-H	KEM
Sulfate	84.		mg/l	50	--	5	05/04/25 15:30	05/04/25 15:30	1,9038	MRW
Total Organic Carbon	ND		mg/l	0.50	--	1	-	05/01/25 02:02	1,9060A	DEW
Surfactants, MBAS	ND		mg/l	0.050	--	1	04/24/25 03:00	04/24/25 06:58	121,5540C	CAR
Iron, Ferrous	ND		mg/l	0.50	--	1	-	04/23/25 21:23	121,3500FE-B	AAS



Project Name: 50 TUFTS STREET

Lab Number: L2525102

Project Number: 045163

Report Date: 05/13/25

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 04,07 Batch: WG2057836-1									
Iron, Ferrous	ND	mg/l	0.50	--	1	-	04/23/25 21:23	121,3500FE-B	AAS
General Chemistry - Westborough Lab for sample(s): 04,07 Batch: WG2057894-1									
Nitrogen, Nitrate	ND	mg/l	0.100	--	1	-	04/24/25 04:18	121,4500NO3-F	MRM
General Chemistry - Westborough Lab for sample(s): 04,07 Batch: WG2057965-1									
Surfactants, MBAS	ND	mg/l	0.050	--	1	04/24/25 03:00	04/24/25 06:53	121,5540C	CAR
General Chemistry - Westborough Lab for sample(s): 04,07 Batch: WG2058042-1									
Chlorine, Total Residual	ND	mg/l	0.02	--	1	04/24/25 08:10	04/24/25 08:52	121,4500CL-G	CAR
General Chemistry - Westborough Lab for sample(s): 04,07 Batch: WG2060942-1									
Total Organic Carbon	ND	mg/l	0.50	--	1	-	05/01/25 02:02	1,9060A	DEW
General Chemistry - Westborough Lab for sample(s): 04,07 Batch: WG2061199-1									
Alkalinity, Total	ND	mg CaCO3/L	2.00	NA	1	-	05/01/25 14:24	121,2320B	MRM
General Chemistry - Westborough Lab for sample(s): 04,07 Batch: WG2061856-1									
Chloride	ND	mg/l	1.0	--	1	-	05/03/25 04:01	1,9251	MRM
General Chemistry - Westborough Lab for sample(s): 04,07 Batch: WG2062088-1									
Nitrogen, Nitrate/Nitrite	ND	mg/l	0.10	--	1	-	05/04/25 08:56	121,4500NO3-F	KAF
General Chemistry - Westborough Lab for sample(s): 04,07 Batch: WG2062126-1									
Sulfate	ND	mg/l	10	--	1	05/04/25 15:30	05/04/25 15:30	1,9038	MRW
General Chemistry - Westborough Lab for sample(s): 07 Batch: WG2064234-1									
Nitrogen, Total Kjeldahl	ND	mg/l	0.300	--	1	05/08/25 22:10	05/09/25 10:33	121,4500NH3-H	KEM
General Chemistry - Westborough Lab for sample(s): 04 Batch: WG2064489-1									
Nitrogen, Total Kjeldahl	ND	mg/l	0.300	--	1	05/09/25 08:00	05/13/25 16:42	121,4500NH3-H	AT



Lab Control Sample Analysis **Batch Quality Control**

Project Name: 50 TUFTS STREET

Project Number: 045163

Lab Number: L2525102

Report Date: 05/13/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 04,07 Batch: WG2057836-2								
Iron, Ferrous	97		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 04,07 Batch: WG2057894-2								
Nitrogen, Nitrate	92		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 04,07 Batch: WG2057965-2								
Surfactants, MBAS	108		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 04,07 Batch: WG2058042-2								
Chlorine, Total Residual	101		-		90-110	-		20
General Chemistry - Westborough Lab Associated sample(s): 04,07 Batch: WG2060942-2								
Total Organic Carbon	100		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 04,07 Batch: WG2061199-2								
Alkalinity, Total	95		-		90-110	-		10
General Chemistry - Westborough Lab Associated sample(s): 04,07 Batch: WG2061856-2								
Chloride	93		-		90-110	-		

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 50 TUFTS STREET

Project Number: 045163

Lab Number: L2525102

Report Date: 05/13/25

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 04,07 Batch: WG2062088-2					
Nitrogen, Nitrate/Nitrite	98	-	90-110	-	20
General Chemistry - Westborough Lab Associated sample(s): 04,07 Batch: WG2062126-2					
Sulfate	95	-	90-110	-	
General Chemistry - Westborough Lab Associated sample(s): 07 Batch: WG2064234-2					
Nitrogen, Total Kjeldahl	88	-	78-122	-	
General Chemistry - Westborough Lab Associated sample(s): 04 Batch: WG2064489-2					
Nitrogen, Total Kjeldahl	89	-	78-122	-	

Matrix Spike Analysis **Batch Quality Control**

Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2525102
Report Date: 05/13/25

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 04,07 QC Batch ID: WG2057836-4 QC Sample: L2525102-04 Client ID: 045163-GEO-2												
Iron, Ferrous	ND	1	1.0	102		-	-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 04,07 QC Batch ID: WG2057894-4 QC Sample: L2525102-07 Client ID: 045163-MW104R												
Nitrogen, Nitrate	2.75	4	6.17	86		-	-		83-113	-		17
General Chemistry - Westborough Lab Associated sample(s): 04,07 QC Batch ID: WG2057965-4 QC Sample: L2525102-04 Client ID: 045163-GEO-2												
Surfactants, MBAS	ND	0.4	0.390	98		-	-		52-157	-		32

Lab Duplicate Analysis

Batch Quality Control

Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2525102
Report Date: 05/13/25

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 04,07 QC Batch ID: WG2057836-3 QC Sample: L2525102-04 Client ID: 045163-GEO-2						
Iron, Ferrous	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 04,07 QC Batch ID: WG2057894-3 QC Sample: L2525102-07 Client ID: 045163-MW104R						
Nitrogen, Nitrate	2.75	2.75	mg/l	0		17
General Chemistry - Westborough Lab Associated sample(s): 04,07 QC Batch ID: WG2057965-3 QC Sample: L2525102-04 Client ID: 045163-GEO-2						
Surfactants, MBAS	ND	ND	mg/l	NC		32
General Chemistry - Westborough Lab Associated sample(s): 04,07 QC Batch ID: WG2058042-3 QC Sample: L2525102-04 Client ID: 045163-GEO-2						
Chlorine, Total Residual	ND	ND	mg/l	NC		20

Project Name: 50 TUFTS STREET**Lab Number:** L2525102**Project Number:** 045163**Report Date:** 05/13/25**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2525102-01A	Vial HCl preserved	A	NA		2.5	Y	Absent		MCP-8260-21(14)
L2525102-01B	Vial HCl preserved	A	NA		2.5	Y	Absent		MCP-8260-21(14)
L2525102-01C	Vial HCl preserved	A	NA		2.5	Y	Absent		MCP-8260-21(14)
L2525102-02A	Vial HCl preserved	A	NA		2.5	Y	Absent		MCP-8260-21(14)
L2525102-02B	Vial HCl preserved	A	NA		2.5	Y	Absent		MCP-8260-21(14)
L2525102-02C	Vial HCl preserved	A	NA		2.5	Y	Absent		MCP-8260-21(14)
L2525102-03A	Vial HCl preserved	A	NA		2.5	Y	Absent		MCP-8260-21(14)
L2525102-03A1	Vial HCl preserved	A	NA		2.5	Y	Absent		MCP-8260-21(14)
L2525102-03A2	Vial HCl preserved	A	NA		2.5	Y	Absent		MCP-8260-21(14)
L2525102-03B	Vial HCl preserved	A	NA		2.5	Y	Absent		MCP-8260-21(14)
L2525102-03B1	Vial HCl preserved	A	NA		2.5	Y	Absent		MCP-8260-21(14)
L2525102-03B2	Vial HCl preserved	A	NA		2.5	Y	Absent		MCP-8260-21(14)
L2525102-03C	Vial HCl preserved	A	NA		2.5	Y	Absent		MCP-8260-21(14)
L2525102-03C1	Vial HCl preserved	A	NA		2.5	Y	Absent		MCP-8260-21(14)
L2525102-03C2	Vial HCl preserved	A	NA		2.5	Y	Absent		MCP-8260-21(14)
L2525102-04A	Vial HCl preserved	A	NA		2.5	Y	Absent		MCP-8260-21(14)
L2525102-04B	Vial HCl preserved	A	NA		2.5	Y	Absent		MCP-8260-21(14)
L2525102-04C	Vial HCl preserved	A	NA		2.5	Y	Absent		MCP-8260-21(14)
L2525102-04D	20ml Vial HCl preserved	A	NA		2.5	Y	Absent		DISSGAS(14)
L2525102-04E	20ml Vial HCl preserved	A	NA		2.5	Y	Absent		DISSGAS(14)
L2525102-04F	Vial H2SO4 preserved	A	NA		2.5	Y	Absent		TOC-9060(28)
L2525102-04G	Vial H2SO4 preserved	A	NA		2.5	Y	Absent		TOC-9060(28)
L2525102-04H	Plastic 250ml unpreserved/No Headspace	A	NA		2.5	Y	Absent		ALK-T-2320(14)

Project Name: 50 TUFTS STREET
Project Number: 045163

Serial_No:05132519:41
Lab Number: L2525102
Report Date: 05/13/25

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2525102-04I	Plastic 250ml HNO3 preserved	A	<2	<2	2.5	Y	Absent		MCP-MN-6010T-10(180)
L2525102-04J	Plastic 250ml H2SO4 preserved	A	<2	<2	2.5	Y	Absent		TKN-4500(28),NO3/NO2-4500(28),TNITROGEN(28)
L2525102-04K	Plastic 250ml Zn Acetate/NaOH preserved	A	>9	>9	2.5	Y	Absent		SUB-SULFIDE(7)
L2525102-04L	Plastic 950ml unpreserved	A	7	7	2.5	Y	Absent		SO4-9038(28),NO3-4500(2),MBAS-5540(2)
L2525102-04M	Plastic 950ml unpreserved	A	7	7	2.5	Y	Absent		TRC-4500-G(1),CL-9251(28),FERROUS(1)
L2525102-05A	Vial HCl preserved	A	NA		2.5	Y	Absent		MCP-8260-21(14)
L2525102-05B	Vial HCl preserved	A	NA		2.5	Y	Absent		MCP-8260-21(14)
L2525102-05C	Vial HCl preserved	A	NA		2.5	Y	Absent		MCP-8260-21(14)
L2525102-06A	Vial HCl preserved	A	NA		2.5	Y	Absent		MCP-8260-21(14)
L2525102-06B	Vial HCl preserved	A	NA		2.5	Y	Absent		MCP-8260-21(14)
L2525102-06C	Vial HCl preserved	A	NA		2.5	Y	Absent		MCP-8260-21(14)
L2525102-07A	Vial HCl preserved	A	NA		2.5	Y	Absent		MCP-8260-21(14)
L2525102-07B	Vial HCl preserved	A	NA		2.5	Y	Absent		MCP-8260-21(14)
L2525102-07C	Vial HCl preserved	A	NA		2.5	Y	Absent		MCP-8260-21(14)
L2525102-07D	20ml Vial HCl preserved	A	NA		2.5	Y	Absent		DISSGAS(14)
L2525102-07E	20ml Vial HCl preserved	A	NA		2.5	Y	Absent		DISSGAS(14)
L2525102-07F	Vial H2SO4 preserved	A	NA		2.5	Y	Absent		TOC-9060(28)
L2525102-07G	Vial H2SO4 preserved	A	NA		2.5	Y	Absent		TOC-9060(28)
L2525102-07H	Plastic 250ml unpreserved/No Headspace	A	NA		2.5	Y	Absent		ALK-T-2320(14)
L2525102-07I	Plastic 250ml HNO3 preserved	A	<2	<2	2.5	Y	Absent		MCP-MN-6010T-10(180)
L2525102-07J	Plastic 250ml H2SO4 preserved	A	<2	<2	2.5	Y	Absent		TKN-4500(28),NO3/NO2-4500(28),TNITROGEN(28)
L2525102-07K	Plastic 250ml Zn Acetate/NaOH preserved	A	>9	>9	2.5	Y	Absent		SUB-SULFIDE(7)
L2525102-07L	Plastic 950ml unpreserved	A	7	7	2.5	Y	Absent		SO4-9038(28),NO3-4500(2),MBAS-5540(2)
L2525102-07M	Plastic 950ml unpreserved	A	7	7	2.5	Y	Absent		TRC-4500-G(1),CL-9251(28),FERROUS(1)

Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2525102
Report Date: 05/13/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report



Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2525102
Report Date: 05/13/25

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

Report Format: Data Usability Report



Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2525102
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Data Qualifiers

- ND** - Not detected at the reporting limit (RL) for the sample.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: 50 TUFTS STREET**Lab Number:** L2525102**Project Number:** 045163**Report Date:** 05/13/25

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.
- 97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSCCAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010; WSC-CAM-IIIA and IIID, January 2024; WSC-CAM-IIIB and VA, February 2024; WSC-CAM-VB and VC, April 2024; and WSC-CAM-VIA, VIB, IXA, and IXB, October 2024.
- 107 Calculation method.
- 117 Technical Guidance for the Natural Attenuation Indicators: Methane, Ethane, and Ethene, EPA-NE, Revision 1, February 21, 2002 and Sample Preparation & Calculations for Dissolved Gas Analysis in Water Samples using a GC Headspace Equilibration Technique, EPA RSKSOP-175, Revision 2, May 2004.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.
- 141 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA and IIB, November 2021.

LIMITATION OF LIABILITIES

Pace Analytical Services performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Pace Analytical Services shall be to re-perform the work at it's own expense. In no event shall Pace Analytical Services be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Pace Analytical Services.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Pace Analytical Services LLCFacility: **Northeast**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

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Published Date: 01/24/2025

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Certification Information**The following analytes are not included in our Primary NELAP Scope of Accreditation:****Westborough Facility – 8 Walkup Dr. Westborough, MA 01581****EPA 624.1:** m/p-xylene, o-xylene, Naphthalene**EPA 625.1:** alpha-Terpineol**EPA 8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****SM 2540D:** TSS.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

MADEP-APH.**Nonpotable Water:** EPA RSK-175 Dissolved Gases**Biological Tissue Matrix:** EPA 3050B**Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048****EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Nonpotable Water: EPA RSK-175 Dissolved Gases**The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:****Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)****The following analytes are included in our Massachusetts DEP Scope of Accreditation****Westborough Facility – 8 Walkup Dr. Westborough, MA 01581*****Drinking Water*****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.***Non-Potable Water*****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables).**Microbiology:** SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048*****Drinking Water*****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg. EPA 522, EPA 537.1.*****Non-Potable Water*****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1 Hg.****SM2340B**

Pace Analytical Services LLCID No.:**17873**Facility: **Northeast**

Revision 27

Department: **Quality Assurance**

Published Date: 01/24/2025

Title: **Certificate/Approval Program Summary**

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Certification IDs:**Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**

CT PH-0826, IL 200077, IN C-MA-03, KY JY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 3090, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048

ANAB/DoD L2474, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

For a complete listing of analytes and methods, please contact your Project Manager.

Method Blank Summary

Form 4

Volatiles

Client	: GEI Consultants	Lab Number	: L2525102
Project Name	: 50 TUFTS STREET	Project Number	: 045163
Lab Sample ID	: WG2060460-5	Lab File ID	: VQ250429B05
Instrument ID	: QUIMBY		
Matrix	: WATER	Analysis Date	: 04/29/25 06:16

Client Sample No.	Lab Sample ID	Analysis Date
WG2060460-3LCS	WG2060460-3	04/29/25 05:07
WG2060460-4LCSD	WG2060460-4	04/29/25 05:30
045163-GEO-1	L2525102-03	04/29/25 06:39
045163-MW202	L2525102-01	04/29/25 07:02
045163-MW201	L2525102-02	04/29/25 07:25
045163-GEO-2	L2525102-04	04/29/25 07:48
045163-MW901	L2525102-05	04/29/25 08:11
045163-MW301	L2525102-06	04/29/25 08:34
045163-MW104R	L2525102-07D	04/29/25 08:57
045163-GEO-1MS	WG2060460-6	04/29/25 14:41
045163-GEO-1MSD	WG2060460-7	04/29/25 15:04

Method Blank Summary Form 4 Volatiles

Client	: GEI Consultants	Lab Number	: L2525102
Project Name	: 50 TUFTS STREET	Project Number	: 045163
Lab Sample ID	: WG2061094-5	Lab File ID	: J250501B05
Instrument ID	: JACK		
Matrix	: WATER	Analysis Date	: 05/01/25 06:33

Client Sample No.	Lab Sample ID	Analysis Date
WG2061094-3LCS	WG2061094-3	05/01/25 04:46
WG2061094-4LCSD	WG2061094-4	05/01/25 05:13
045163-MW104R	L2525102-07D2	05/01/25 07:26

Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : 50 TUFTS STREET
 Instrument ID : QUIMBY
 Lab File ID : VQ250429B02
 Sample No : WG2060460-2
 Channel :

Lab Number : L2525102
 Project Number : 045163
 Calibration Date : 04/29/25 05:07
 Init. Calib. Date(s) : 04/02/25 04/02/25
 Init. Calib. Times : 04:37 09:38

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	81	0
Dichlorodifluoromethane	0.287	0.314	-	-9.4	20	86	0
Chloromethane	0.372	0.28	-	24.7*	20	58	0
Vinyl chloride	0.253	0.232	-	8.3	20	72	0
Bromomethane	0.117	0.111	-	5.1	20	80	0
Chloroethane	0.141	0.146	-	-3.5	20	82	0
Trichlorofluoromethane	0.323	0.414	-	-28.2*	20	99	0
Ethyl ether	0.1	0.102	-	-2	20	79	0
1,1-Dichloroethene	0.157	0.172	-	-9.6	20	86	0
Carbon disulfide	0.432	0.456	-	-5.6	20	86	0
Freon-113	0.174	0.198	-	-13.8	20	87	0
Methylene chloride	0.177	0.193	-	-9	20	85	0
Acetone	10	13.39	-	-33.9*	20	100	0
trans-1,2-Dichloroethene	0.171	0.177	-	-3.5	20	84	0
Methyl acetate	0.12	0.107	-	10.8	20	72	0
Methyl tert-butyl ether	0.511	0.574	-	-12.3	20	88	0
tert-Butyl alcohol	0.00921	0.01342	-	-45.7*	20	124	-.01
Diisopropyl ether	0.79	0.693	-	12.3	20	67	0
1,1-Dichloroethane	0.468	0.412	-	12	20	66	0
Halothane	0.168	0.134	-	20.2*	20	62	0
Acrylonitrile	0.072	0.052	-	27.8*	20	58	0
Ethyl tert-butyl ether	0.738	0.654	-	11.4	20	73	0
Vinyl acetate	0.495	0.438	-	11.5	20	73	0
cis-1,2-Dichloroethene	0.233	0.202	-	13.3	20	71	0
2,2-Dichloropropane	0.343	0.384	-	-12	20	90	0
Bromochloromethane	0.11	0.098*	-	10.9	20	66	0
Cyclohexane	0.473	0.387	-	18.2	20	67	0
Chloroform	0.402	0.416	-	-3.5	20	80	0
Ethyl acetate	0.187	0.153	-	18.2	20	68	0
Carbon tetrachloride	0.32	0.347	-	-8.4	20	84	0
Tetrahydrofuran	0.065	0.051	-	21.5*	20	65	0
Dibromofluoromethane	0.311	0.287	-	7.7	20	73	0
1,1,1-Trichloroethane	0.348	0.394	-	-13.2	20	87	0
2-Butanone	0.081	0.07	-	13.6	20	81	0
1,1-Dichloropropene	0.279	0.253	-	9.3	20	76	0
Benzene	0.88	0.805	-	8.5	20	70	0
tert-Amyl methyl ether	0.509	0.461	-	9.4	20	76	0
1,2-Dichloroethane-d4	0.38	0.405	-	-6.6	20	84	0
1,2-Dichloroethane	0.326	0.345	-	-5.8	20	82	0
Methyl cyclohexane	0.353	0.322	-	8.8	20	75	0
Trichloroethene	0.225	0.223	-	0.9	20	76	0
Dibromomethane	0.119	0.113	-	5	20	72	0
1,2-Dichloropropane	0.252	0.209	-	17.1	20	64	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : 50 TUFTS STREET
 Instrument ID : QUIMBY
 Lab File ID : VQ250429B02
 Sample No : WG2060460-2
 Channel :

Lab Number : L2525102
 Project Number : 045163
 Calibration Date : 04/29/25 05:07
 Init. Calib. Date(s) : 04/02/25 04/02/25
 Init. Calib. Times : 04:37 09:38

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Bromodichloromethane	0.297	0.305	-	-2.7	20	80	0
1,4-Dioxane	0.00073	0.00084*	-	-15.1	20	111	0
cis-1,3-Dichloropropene	0.328	0.305	-	7	20	71	0
Chlorobenzene-d5	1	1	-	0	20	78	0
Toluene-d8	1.521	1.4	-	8	20	70	0
Toluene	0.731	0.694	-	5.1	20	70	0
4-Methyl-2-pentanone	0.076	0.057	-	25*	20	66	0
Tetrachloroethene	0.322	0.316	-	1.9	20	75	0
trans-1,3-Dichloropropene	0.384	0.388	-	-1	20	76	0
Ethyl methacrylate	0.27	0.221	-	18.1	20	68	0
1,1,2-Trichloroethane	0.195	0.187*	-	4.1	20	70	0
Chlorodibromomethane	0.278	0.27	-	2.9	20	73	0
1,3-Dichloropropane	0.411	0.389	-	5.4	20	70	0
1,2-Dibromoethane	0.223	0.2*	-	10.3	20	68	0
2-Hexanone	0.13	0.105	-	19.2	20	69	0
Chlorobenzene	0.799	0.724	-	9.4	20	68	0
Ethylbenzene	1.337	1.336	-	0.1	20	73	0
1,1,1,2-Tetrachloroethane	0.3	0.3	-	0	20	74	0
p/m Xylene	0.512	0.515	-	-0.6	20	70	0
o Xylene	0.488	0.481	-	1.4	20	69	0
Styrene	0.818	0.846	-	-3.4	20	69	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	89	0
Bromoform	0.289	0.258	-	10.7	20	81	0
Isopropylbenzene	2.184	1.839	-	15.8	20	74	0
4-Bromofluorobenzene	0.959	0.772	-	19.5	20	75	0
Bromobenzene	0.596	0.508	-	14.8	20	75	0
n-Propylbenzene	2.656	2.338	-	12	20	76	0
1,4-Dichlorobutane	0.85	0.648	-	23.8*	20	67	0
1,1,2,2-Tetrachloroethane	0.473	0.374	-	20.9*	20	71	0
4-Ethyltoluene	2.203	1.921	-	12.8	20	74	0
2-Chlorotoluene	1.965	1.773	-	9.8	20	77	0
1,3,5-Trimethylbenzene	1.935	1.747	-	9.7	20	76	0
1,2,3-Trichloropropane	0.394	0.332	-	15.7	20	74	0
trans-1,4-Dichloro-2-buten	0.162	0.138	-	14.8	20	75	0
4-Chlorotoluene	1.761	1.557	-	11.6	20	76	0
tert-Butylbenzene	1.595	1.338	-	16.1	20	73	0
1,2,4-Trimethylbenzene	1.867	1.714	-	8.2	20	75	0
sec-Butylbenzene	2.303	2.087	-	9.4	20	78	0
p-Isopropyltoluene	1.962	1.737	-	11.5	20	76	0
1,3-Dichlorobenzene	1.171	1.002	-	14.4	20	72	0
1,4-Dichlorobenzene	1.209	0.999	-	17.4	20	73	0
p-Diethylbenzene	1.162	0.98	-	15.7	20	76	0
n-Butylbenzene	1.717	1.634	-	4.8	20	82	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : 50 TUFTS STREET
 Instrument ID : QUIMBY
 Lab File ID : VQ250429B02
 Sample No : WG2060460-2
 Channel :

Lab Number : L2525102
 Project Number : 045163
 Calibration Date : 04/29/25 05:07
 Init. Calib. Date(s) : 04/02/25 04/02/25
 Init. Calib. Times : 04:37 09:38

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,2-Dichlorobenzene	1.102	0.93	-	15.6	20	72	0
1,2,4,5-Tetramethylbenzene	1.893	1.416	-	25.2*	20	73	0
1,2-Dibromo-3-chloropropan	0.068	0.06	-	11.8	20	82	0
1,3,5-Trichlorobenzene	0.86	0.785	-	8.7	20	81	0
Hexachlorobutadiene	0.314	0.311	-	1	20	100	0
1,2,4-Trichlorobenzene	0.76	0.637	-	16.2	20	78	0
Naphthalene	1.459	1.095	-	24.9*	20	69	0
1,2,3-Trichlorobenzene	0.709	0.618	-	12.8	20	76	0

* Value outside of QC limits.

Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : 50 TUFTS STREET
 Instrument ID : JACK
 Lab File ID : J250501B01
 Sample No : WG2061094-2
 Channel :

Lab Number : L2525102
 Project Number : 045163
 Calibration Date : 05/01/25 04:46
 Init. Calib. Date(s) : 02/28/25 02/28/25
 Init. Calib. Times : 05:35 08:42

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	105	0
Dichlorodifluoromethane	0.28	0.254	-	9.3	20	93	0
Chloromethane	0.294	0.348	-	-18.4	20	124	0
Vinyl chloride	0.352	0.276	-	21.6*	20	80	0
Bromomethane	0.178	0.131	-	26.4*	20	80	0
Chloroethane	0.189	0.139	-	26.5*	20	75	0
Trichlorofluoromethane	0.411	0.392	-	4.6	20	96	0
Ethyl ether	0.116	0.117	-	-0.9	20	104	0
1,1-Dichloroethene	0.228	0.213	-	6.6	20	98	0
Carbon disulfide	0.7	0.69	-	1.4	20	104	0
Freon-113	0.246	0.239	-	2.8	20	101	0
Acrolein	0.041	0.041	-	0	20	111	0
Methylene chloride	0.247	0.245	-	0.8	20	105	0
Acetone	0.077	0.078	-	-1.3	20	110	0
trans-1,2-Dichloroethene	0.247	0.235	-	4.9	20	98	0
Methyl acetate	0.167	0.178	-	-6.6	20	115	0
Methyl tert-butyl ether	0.682	0.604	-	11.4	20	93	0
tert-Butyl alcohol	0.026	0.022	-	15.4	20	78	0
Diisopropyl ether	0.875	0.89	-	-1.7	20	107	0
1,1-Dichloroethane	0.492	0.497	-	-1	20	106	0
Halothane	0.201	0.201	-	0	20	103	0
Acrylonitrile	0.082	0.084	-	-2.4	20	106	0
Ethyl tert-butyl ether	0.785	0.707	-	9.9	20	96	0
Vinyl acetate	0.688	0.579	-	15.8	20	90	0
cis-1,2-Dichloroethene	0.272	0.258	-	5.1	20	99	0
2,2-Dichloropropane	0.423	0.4	-	5.4	20	101	0
Bromochloromethane	0.122	0.122	-	0	20	101	0
Cyclohexane	0.51	0.507	-	0.6	20	105	0
Chloroform	0.462	0.435	-	5.8	20	101	0
Ethyl acetate	0.269	0.258	-	4.1	20	100	0
Carbon tetrachloride	0.363	0.365	-	-0.6	20	102	0
Tetrahydrofuran	0.095	0.097	-	-2.1	20	104	0
Dibromofluoromethane	0.264	0.277	-	-4.9	20	109	0
1,1,1-Trichloroethane	0.408	0.41	-	-0.5	20	105	0
2-Butanone	0.121	0.1	-	17.4	20	89	0
1,1-Dichloropropene	0.335	0.311	-	7.2	20	96	0
Benzene	1.011	0.968	-	4.3	20	102	0
tert-Amyl methyl ether	0.688	0.563	-	18.2	20	85	0
1,2-Dichloroethane-d4	0.324	0.315	-	2.8	20	104	0
1,2-Dichloroethane	0.355	0.317	-	10.7	20	93	0
Methyl cyclohexane	0.47	0.435	-	7.4	20	101	0
Trichloroethene	0.271	0.258	-	4.8	20	99	0
Dibromomethane	0.153	0.139	-	9.2	20	92	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : 50 TUFTS STREET
 Instrument ID : JACK
 Lab File ID : J250501B01
 Sample No : WG2061094-2
 Channel :

Lab Number : L2525102
 Project Number : 045163
 Calibration Date : 05/01/25 04:46
 Init. Calib. Date(s) : 02/28/25 02/28/25
 Init. Calib. Times : 05:35 08:42

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,2-Dichloropropane	0.262	0.26	-	0.8	20	97	0
2-Chloroethyl vinyl ether	0.159	0.122	-	23.3*	20	76	0
Bromodichloromethane	0.344	0.333	-	3.2	20	97	0
1,4-Dioxane	0.00217	0.00191*	-	12	20	94	0
cis-1,3-Dichloropropene	0.409	0.37	-	9.5	20	90	0
Chlorobenzene-d5	1	1	-	0	20	111	0
Toluene-d8	1.318	1.258	-	4.6	20	106	0
Toluene	0.882	0.759	-	13.9	20	96	0
4-Methyl-2-pentanone	0.125	0.097	-	22.4*	20	83	0
Tetrachloroethene	0.411	0.352	-	14.4	20	95	0
trans-1,3-Dichloropropene	0.495	0.41	-	17.2	20	88	0
Ethyl methacrylate	0.424	0.328	-	22.6*	20	81	0
1,1,2-Trichloroethane	0.262	0.23	-	12.2	20	90	0
Chlorodibromomethane	0.365	0.312	-	14.5	20	91	0
1,3-Dichloropropane	0.486	0.428	-	11.9	20	94	0
1,2-Dibromoethane	0.295	0.252	-	14.6	20	90	0
2-Hexanone	0.255	0.203	-	20.4*	20	82	0
Chlorobenzene	0.973	0.86	-	11.6	20	94	0
Ethylbenzene	1.752	1.483	-	15.4	20	93	0
1,1,1,2-Tetrachloroethane	0.357	0.31	-	13.2	20	93	0
p/m Xylene	0.685	0.595	-	13.1	20	96	0
o Xylene	0.658	0.57	-	13.4	20	95	0
Styrene	1.121	0.936	-	16.5	20	91	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	113	0
Bromoform	0.441	0.352	-	20.2*	20	83	0
Isopropylbenzene	3.009	2.559	-	15	20	93	0
4-Bromofluorobenzene	0.855	0.783	-	8.4	20	105	0
Bromobenzene	0.72	0.625	-	13.2	20	92	0
n-Propylbenzene	3.645	3.089	-	15.3	20	93	0
1,4-Dichlorobutane	0.953	0.837	-	12.2	20	96	0
1,1,2,2-Tetrachloroethane	0.7	0.558	-	20.3*	20	82	0
4-Ethyltoluene	2.97	2.601	-	12.4	20	96	0
2-Chlorotoluene	2.404	2.023	-	15.8	20	92	0
1,3,5-Trimethylbenzene	2.587	2.231	-	13.8	20	96	0
1,2,3-Trichloropropane	0.56	0.449	-	19.8	20	85	0
trans-1,4-Dichloro-2-buten	0.238	0.188	-	21*	20	82	0
4-Chlorotoluene	2.179	1.852	-	15	20	92	0
tert-Butylbenzene	2.151	1.904	-	11.5	20	98	0
1,2,4-Trimethylbenzene	2.516	2.187	-	13.1	20	95	0
sec-Butylbenzene	3.283	2.837	-	13.6	20	96	0
p-Isopropyltoluene	2.792	2.503	-	10.4	20	99	0
1,3-Dichlorobenzene	1.47	1.25	-	15	20	92	0
1,4-Dichlorobenzene	1.47	1.26	-	14.3	20	92	0

* Value outside of QC limits.

Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : 50 TUFTS STREET
 Instrument ID : JACK
 Lab File ID : J250501B01
 Sample No : WG2061094-2
 Channel :

Lab Number : L2525102
 Project Number : 045163
 Calibration Date : 05/01/25 04:46
 Init. Calib. Date(s) : 02/28/25 02/28/25
 Init. Calib. Times : 05:35 08:42

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
p-Diethylbenzene	1.637	1.476	-	9.8	20	99	0
n-Butylbenzene	2.502	2.134	-	14.7	20	95	0
1,2-Dichlorobenzene	1.362	1.16	-	14.8	20	92	0
1,2,4,5-Tetramethylbenzene	2.513	2.13	-	15.2	20	95	0
1,2-Dibromo-3-chloropropan	0.133	0.107	-	19.5	20	86	0
1,3,5-Trichlorobenzene	1.072	0.912	-	14.9	20	94	0
Hexachlorobutadiene	0.458	0.378	-	17.5	20	96	0
1,2,4-Trichlorobenzene	0.948	0.776	-	18.1	20	91	0
Naphthalene	2.388	2.082	-	12.8	20	95	0
1,2,3-Trichlorobenzene	0.868	0.734	-	15.4	20	93	0

* Value outside of QC limits.

May 1, 2025

Jennifer Byrnes
Pace Analytical Services - Westborough, MA
8 Walkup Drive
Westborough, MA 01581

Project Location: L2525102
Client Job Number:
Project Number: L2525102
Laboratory Work Order Number: 25D1911

Enclosed are results of analyses for samples as received by the laboratory on April 24, 2025. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Rebecca Faust
Project Manager

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Pace Analytical Services, LLC - East Longmeadow, Ma

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Pace Analytical Services - Westborough, MA
8 Walkup Drive
Westborough, MA 01581
ATTN: Jennifer Byrnes

REPORT DATE: 5/1/2025

PURCHASE ORDER NUMBER:

PROJECT NUMBER: L2525102

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 25D1911

The results of analyses performed on the following samples submitted to Pace Analytical Services, LLC - East Longmeadow, Ma, are found in this report.

PROJECT LOCATION: L2525102

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
045163-GEO-2	25D1911-01	Water		SM21-24 4500S-F	
045163-MW104R	25D1911-02	Water		SM21-24 4500S-F	

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to Pace Analytical Services, LLC - East Longmeadow, Ma, for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

A handwritten signature in black ink, appearing to read "Lisa Worthington", written over a light pink rectangular background.

Lisa A. Worthington
Technical Representative



Pace Analytical Services, LLC - East Longmeadow, Ma

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: L2525102

Sample Description:

Work Order: 25D1911

Date Received: 4/24/2025

Field Sample #: 045163-GEO-2

Sampled: 4/23/2025 12:50

Sample ID: 25D1911-01

Sample Matrix: Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Sulfide	ND	2.0	mg/L	1		SM21-24 4500S-F	4/30/25	4/30/25 18:25	EC



Pace Analytical Services, LLC - East Longmeadow, Ma

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: L2525102

Sample Description:

Work Order: 25D1911

Date Received: 4/24/2025

Field Sample #: 045163-MW104R

Sampled: 4/23/2025 13:50

Sample ID: 25D1911-02

Sample Matrix: Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Sulfide	ND	2.0	mg/L	1		SM21-24 4500S-F	4/30/25	4/30/25 18:25	EC

**Sample Extraction Data**

SM21-24 4500S-F

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
25D1911-01 [045163-GEO-2]	B404155	200	200	04/30/25
25D1911-02 [045163-MW104R]	B404155	200	200	04/30/25



Pace Analytical Services, LLC - East Longmeadow, Ma

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Batch B404155 - SM21-24 4500S-F

Blank (B404155-BLK1)

Prepared & Analyzed: 04/30/25

Sulfide	ND	2.0	mg/L
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LCS (B404155-BS1)

Prepared & Analyzed: 04/30/25

Sulfide	9.2	2.0	mg/L	10.05	91.5	72.4-110
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LCS Dup (B404155-BSD1)

Prepared & Analyzed: 04/30/25

Sulfide	9.4	2.0	mg/L	10.05	93.5	72.4-110	2.15	9.91
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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.	
No results have been blank subtracted unless specified in the case narrative section.	



Pace Analytical Services, LLC - East Longmeadow, Ma

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS**Certified Analyses included in this Report**

Analyte	Certifications
---------	----------------

SM21-24 4500S-F in Water

Sulfide NY,NH,RI,NC,ME,CT

Pace Analytical Services, LLC - East Longmeadow, Ma, operates under the following certifications and accreditations:

Code	Description	Number	Expires
CT	Connecticut Department of Public Health	PH-0821	12/31/2026
NY	New York State Department of Health	10899 NELAP	04/1/2026
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2026
RI	Rhode Island Department of Health	LAO00373	12/30/2025
NC	North Carolina Div. of Water Quality	652	12/31/2025
ME	State of Maine	MA00100	06/9/2025

25D1911

		Subcontract Chain of Custody Pace New England 39 Spruce St East Longmeadow, MA 01028		Pace Job Number L2525102				
Client Information		Project Information		Regulatory Requirements/Report Limits				
Client: Pace Analytical Labs Address: Eight Walkup Drive Westborough, MA 01581-1019 Report To: west.subreports@pacelabs.com Bill To: invoices@pacelabs.coupahost.com Phone: 716.427.5228 Email: Jennifer.Bymes@pacelabs.com		Project Location: MA Project Manager: Jennifer Bymes Turnaround & Deliverables Information Due Date: Deliverables:		State/Federal Program: MCP Regulatory Criteria: GW-1-24 Report to RL				
Project Specific Requirements and/or Report Requirements								
Reference following Pace Job Number on final report/deliverables: L2525102 Report to include Method and/or Regulatory required batch QC								
Additional Comments:								
Lab ID	Pace ID	Client ID	Collection Date/Time	Sample Matrix	Analysis	Sample Level Comments	Sample Specific QC	Container Count
	L2525102-04 L2525102-07	045163-GEO-2 045163-MW104R	04-23-25 12:50 04-23-25 13:50	WATER WATER	Sulfide Sulfide			1 1
Relinquished By:			Date/Time:		Received By:		Date/Time:	
			4/24/25 05:07				4-24-25 5:07	
			4-24-25 6:35				0635	
			4-24-25 6:35				0635	
Form No: AL_subcoc								

	DC#_Title: ENV-FRM-ELON-0001 v08_Sample Receiving Checklist
	Effective Date: 06/11/2024

Log In Back-Sheet

Client Westborough
 Project L2525102
 MCP/RCP Required NA ma mcp
 Deliverable Package Requirement GW-1
 Location MA
 PWSID# (When Applicable) NA
 Arrival Method:
 Courier ☒ Fed Ex ☐ Walk In ☐ Other ☐
 Received By / Date / Time MEM 4/14/15 635
 Back-Sheet By / Date / Time gc 4/14/15 927
 Temperature Method gun # 6
 WV samples: Yes (see note*) / No (follow normal procedure)
 Temp < 6° C Actual Temperature 0.7
 Rush Samples: Yes / No Notify
 Short Hold: Yes / No Notify

Notes regarding Samples/COC outside of SOP:

Login Sample Receipt Checklist - (Rejection Criteria Listing
 - Using Acceptance Policy) Any False statement will be
 brought to the attention of the Client - True or False

	True	False
Received on Ice	☒	☐
Received in Cooler	☒	☐
Custody Seal: DATE TIME	☐	☒
COC Relinquished	☒	☐
COC/Samples Labels Agree	☒	☐
All Samples in Good Condition	☒	☐
Samples Received within Holding Time	☒	☐
Is there enough Volume	☒	☐
Proper Media/Container Used	☒	☐
Splitting Samples Required	☐	☒
MS/MSD	☐	☒
Trip Blanks	☐	☒
Lab to Filters	☐	☒
COC Legible	☒	☐
COC Included: (Check all included)		
Client ☒ Analysis ☒ Sampler Name ☒		
Project ☒ IDs ☒ Collection Date/Time ☒		
All Samples Proper pH: N/A	☒	☐

Additional Container Notes

**Note: West Virginia requires all samples to have their
 temperature taken. Note any outliers.*

Sample	Soils Jars (Circle Amb/Clear)				Ambers				Plastics								VOA Vials					Other / Fill in					
	16oz Amb/Clear	8oz Amb/Clear	4oz Amb/Clear	2oz Amb/Clear	1 Liter		250mL		100mL	1 Liter			500mL		250mL					Unpreserved	HCl	MeOH	D.I. Water	BiSulfate	Col/Bact		
					Unpreserved	HCL	Sulfuric	Sulfuric	Phosphoric	HCl	Unpreserved	Sulfuric	Sulfuric	Unpreserved	Sulfuric	Unpreserved	Trizma	Sulfuric	Nitric							NaOH	Ammonium Acetate
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	DC#_Title: ENV-FRM-ELON-0001 v08_Sample Receiving Checklist	Effective Date: 06/11/2024



ANALYTICAL REPORT

Lab Number:	L2525107
Client:	GEI Consultants 400 Unicorn Park Drive Woburn, MA 01801
ATTN:	Chris Coner
Phone:	(781) 721-4000
Project Name:	50 TUFTS STREET
Project Number:	045163
Report Date:	05/05/25

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2525107
Report Date: 05/05/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2525107-01	045163-MW102	WATER	SOMERVILLE, MASSACHUSETTS	04/23/25 08:50	04/23/25
L2525107-02	045163-MW121S	WATER	SOMERVILLE, MASSACHUSETTS	04/23/25 11:00	04/23/25
L2525107-03	045163-MW121D	WATER	SOMERVILLE, MASSACHUSETTS	04/23/25 11:40	04/23/25
L2525107-04	045163-MW103	WATER	SOMERVILLE, MASSACHUSETTS	04/23/25 14:10	04/23/25

Project Name: 50 TUFTS STREET

Lab Number: L2525107

Project Number: 045163

Report Date: 05/05/25

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES
A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	NO
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	YES
For any questions answered "No", please refer to the case narrative section on the following page(s).		

Please note that sample matrix information is located in the Sample Results section of this report.



Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2525107
Report Date: 05/05/25

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Pace Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Pace's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Pace Project Manager and made arrangements for Pace to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2525107
Report Date: 05/05/25

Case Narrative (continued)

MCP Related Narratives

Volatile Organics

In reference to question H:

L2525107-01, -02, -03, and -04: Initial Calibration did not meet:

Lowest Calibration Standard Minimum Response Factor: 1,4-dioxane (0.0019)

Average Response Factor: 1,4-dioxane

Verification: dichlorodifluoromethane (136%)

L2525107-01, -02, -03, and -04: The associated continuing calibration standard is outside the acceptance criteria for several compounds; however, it is within overall method allowances. Associated results are considered to be biased high if the %D is negative and biased low if the %D is positive. A copy of the continuing calibration standard is included as an addendum to this report.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:



Cristin Walker

Title: Technical Director/Representative

Date: 05/05/25

QC OUTLIER SUMMARY REPORT

Project Name: 50 TUFTS STREET

Lab Number: L2525107

Project Number: 045163

Report Date: 05/05/25

Method	Client ID (Native ID)	Lab ID	Parameter	QC Type	Recovery/RPD (%)	QC Limits (%)	Associated Samples	Data Quality Assessment
MCP Volatile Organics - Westborough Lab								
8260D	Batch QC	WG2060421-3	Bromomethane	LCS	62	70-130	01,03-04	potential low bias
8260D	Batch QC	WG2060421-4	Bromomethane	LCSD	61	70-130	01,03-04	potential low bias

ORGANICS

VOLATILES

Project Name: 50 TUFTS STREET**Lab Number:** L2525107**Project Number:** 045163**Report Date:** 05/05/25**SAMPLE RESULTS**

Lab ID: L2525107-01
 Client ID: 045163-MW102
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/23/25 08:50
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 141,8260D
 Analytical Date: 04/29/25 13:35
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	5.5		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: 50 TUFTS STREET**Lab Number:** L2525107**Project Number:** 045163**Report Date:** 05/05/25**SAMPLE RESULTS**

Lab ID: L2525107-01
 Client ID: 045163-MW102
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/23/25 08:50
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: 50 TUFTS STREET**Lab Number:** L2525107**Project Number:** 045163**Report Date:** 05/05/25**SAMPLE RESULTS****Lab ID:** L2525107-01**Date Collected:** 04/23/25 08:50**Client ID:** 045163-MW102**Date Received:** 04/23/25**Sample Location:** SOMERVILLE, MASSACHUSETTS**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	117		70-130

Project Name: 50 TUFTS STREET**Lab Number:** L2525107**Project Number:** 045163**Report Date:** 05/05/25**SAMPLE RESULTS**

Lab ID: L2525107-02
 Client ID: 045163-MW121S
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/23/25 11:00
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water

Analytical Method: 141,8260D

Analytical Date: 05/01/25 07:00

Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: 50 TUFTS STREET**Lab Number:** L2525107**Project Number:** 045163**Report Date:** 05/05/25**SAMPLE RESULTS**

Lab ID: L2525107-02
 Client ID: 045163-MW121S
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/23/25 11:00
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: 50 TUFTS STREET**Lab Number:** L2525107**Project Number:** 045163**Report Date:** 05/05/25**SAMPLE RESULTS****Lab ID:** L2525107-02**Date Collected:** 04/23/25 11:00**Client ID:** 045163-MW121S**Date Received:** 04/23/25**Sample Location:** SOMERVILLE, MASSACHUSETTS**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	115		70-130

Project Name: 50 TUFTS STREET**Lab Number:** L2525107**Project Number:** 045163**Report Date:** 05/05/25**SAMPLE RESULTS**

Lab ID: L2525107-03
 Client ID: 045163-MW121D
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/23/25 11:40
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water

Analytical Method: 141,8260D

Analytical Date: 04/29/25 13:08

Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	8.4		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	1.6		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	2.8		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	1.4		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: 50 TUFTS STREET**Lab Number:** L2525107**Project Number:** 045163**Report Date:** 05/05/25**SAMPLE RESULTS**

Lab ID: L2525107-03
 Client ID: 045163-MW121D
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/23/25 11:40
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	4.5		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	9.0		ug/l	1.0	--	1
1,2-Dichloroethene, Total	9.0		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: 50 TUFTS STREET**Lab Number:** L2525107**Project Number:** 045163**Report Date:** 05/05/25**SAMPLE RESULTS****Lab ID:** L2525107-03**Date Collected:** 04/23/25 11:40**Client ID:** 045163-MW121D**Date Received:** 04/23/25**Sample Location:** SOMERVILLE, MASSACHUSETTS**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	114		70-130

Project Name: 50 TUFTS STREET**Lab Number:** L2525107**Project Number:** 045163**Report Date:** 05/05/25**SAMPLE RESULTS**

Lab ID: L2525107-04
 Client ID: 045163-MW103
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/23/25 14:10
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 141,8260D
 Analytical Date: 04/29/25 12:41
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	27		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: 50 TUFTS STREET**Lab Number:** L2525107**Project Number:** 045163**Report Date:** 05/05/25**SAMPLE RESULTS**

Lab ID: L2525107-04
 Client ID: 045163-MW103
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/23/25 14:10
 Date Received: 04/23/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	2.3		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: 50 TUFTS STREET**Lab Number:** L2525107**Project Number:** 045163**Report Date:** 05/05/25**SAMPLE RESULTS****Lab ID:** L2525107-04**Date Collected:** 04/23/25 14:10**Client ID:** 045163-MW103**Date Received:** 04/23/25**Sample Location:** SOMERVILLE, MASSACHUSETTS**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	110		70-130

Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2525107
Report Date: 05/05/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 141,8260D
 Analytical Date: 04/29/25 06:25
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01,03-04 Batch: WG2060421-5					
Methylene chloride	ND		ug/l	2.0	--
1,1-Dichloroethane	ND		ug/l	1.0	--
Chloroform	ND		ug/l	1.0	--
Carbon tetrachloride	ND		ug/l	1.0	--
1,2-Dichloropropane	ND		ug/l	1.0	--
Dibromochloromethane	ND		ug/l	1.0	--
1,1,2-Trichloroethane	ND		ug/l	1.0	--
Tetrachloroethene	ND		ug/l	1.0	--
Chlorobenzene	ND		ug/l	1.0	--
Trichlorofluoromethane	ND		ug/l	2.0	--
1,2-Dichloroethane	ND		ug/l	1.0	--
1,1,1-Trichloroethane	ND		ug/l	1.0	--
Bromodichloromethane	ND		ug/l	1.0	--
trans-1,3-Dichloropropene	ND		ug/l	0.40	--
cis-1,3-Dichloropropene	ND		ug/l	0.40	--
1,3-Dichloropropene, Total	ND		ug/l	0.40	--
1,1-Dichloropropene	ND		ug/l	2.0	--
Bromoform	ND		ug/l	2.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--
Benzene	ND		ug/l	0.50	--
Toluene	ND		ug/l	1.0	--
Ethylbenzene	ND		ug/l	1.0	--
Chloromethane	ND		ug/l	2.0	--
Bromomethane	ND		ug/l	2.0	--
Vinyl chloride	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	2.0	--
1,1-Dichloroethene	ND		ug/l	1.0	--
trans-1,2-Dichloroethene	ND		ug/l	1.0	--
Trichloroethene	ND		ug/l	1.0	--



Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2525107
Report Date: 05/05/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 141,8260D
Analytical Date: 04/29/25 06:25
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01,03-04 Batch: WG2060421-5					
1,2-Dichlorobenzene	ND		ug/l	1.0	--
1,3-Dichlorobenzene	ND		ug/l	1.0	--
1,4-Dichlorobenzene	ND		ug/l	1.0	--
Methyl tert butyl ether	ND		ug/l	2.0	--
p/m-Xylene	ND		ug/l	2.0	--
o-Xylene	ND		ug/l	1.0	--
Xylenes, Total	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	1.0	--
1,2-Dichloroethene, Total	ND		ug/l	1.0	--
Dibromomethane	ND		ug/l	2.0	--
1,2,3-Trichloropropane	ND		ug/l	2.0	--
Styrene	ND		ug/l	1.0	--
Dichlorodifluoromethane	ND		ug/l	2.0	--
Acetone	ND		ug/l	5.0	--
Carbon disulfide	ND		ug/l	2.0	--
Methyl ethyl ketone	ND		ug/l	5.0	--
Methyl isobutyl ketone	ND		ug/l	5.0	--
2-Hexanone	ND		ug/l	5.0	--
Bromochloromethane	ND		ug/l	2.0	--
Tetrahydrofuran	ND		ug/l	2.0	--
2,2-Dichloropropane	ND		ug/l	2.0	--
1,2-Dibromoethane	ND		ug/l	2.0	--
1,3-Dichloropropane	ND		ug/l	2.0	--
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--
Bromobenzene	ND		ug/l	2.0	--
n-Butylbenzene	ND		ug/l	2.0	--
sec-Butylbenzene	ND		ug/l	2.0	--
tert-Butylbenzene	ND		ug/l	2.0	--
o-Chlorotoluene	ND		ug/l	2.0	--



Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2525107
Report Date: 05/05/25

Method Blank Analysis Batch Quality Control

Analytical Method: 141,8260D
Analytical Date: 04/29/25 06:25
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01,03-04 Batch: WG2060421-5					
p-Chlorotoluene	ND		ug/l	2.0	--
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--
Hexachlorobutadiene	ND		ug/l	0.60	--
Isopropylbenzene	ND		ug/l	2.0	--
p-Isopropyltoluene	ND		ug/l	2.0	--
Naphthalene	ND		ug/l	2.0	--
n-Propylbenzene	ND		ug/l	2.0	--
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--
Diethyl ether	ND		ug/l	2.0	--
Diisopropyl Ether	ND		ug/l	2.0	--
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--
1,4-Dioxane	ND		ug/l	250	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	117		70-130

Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2525107
Report Date: 05/05/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 141,8260D
 Analytical Date: 05/01/25 06:33
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 02 Batch: WG2061094-5					
Methylene chloride	ND		ug/l	2.0	--
1,1-Dichloroethane	ND		ug/l	1.0	--
Chloroform	ND		ug/l	1.0	--
Carbon tetrachloride	ND		ug/l	1.0	--
1,2-Dichloropropane	ND		ug/l	1.0	--
Dibromochloromethane	ND		ug/l	1.0	--
1,1,2-Trichloroethane	ND		ug/l	1.0	--
Tetrachloroethene	ND		ug/l	1.0	--
Chlorobenzene	ND		ug/l	1.0	--
Trichlorofluoromethane	ND		ug/l	2.0	--
1,2-Dichloroethane	ND		ug/l	1.0	--
1,1,1-Trichloroethane	ND		ug/l	1.0	--
Bromodichloromethane	ND		ug/l	1.0	--
trans-1,3-Dichloropropene	ND		ug/l	0.40	--
cis-1,3-Dichloropropene	ND		ug/l	0.40	--
1,3-Dichloropropene, Total	ND		ug/l	0.40	--
1,1-Dichloropropene	ND		ug/l	2.0	--
Bromoform	ND		ug/l	2.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--
Benzene	ND		ug/l	0.50	--
Toluene	ND		ug/l	1.0	--
Ethylbenzene	ND		ug/l	1.0	--
Chloromethane	ND		ug/l	2.0	--
Bromomethane	ND		ug/l	2.0	--
Vinyl chloride	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	2.0	--
1,1-Dichloroethene	ND		ug/l	1.0	--
trans-1,2-Dichloroethene	ND		ug/l	1.0	--
Trichloroethene	ND		ug/l	1.0	--



Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2525107
Report Date: 05/05/25

Method Blank Analysis Batch Quality Control

Analytical Method: 141,8260D
 Analytical Date: 05/01/25 06:33
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 02 Batch: WG2061094-5					
1,2-Dichlorobenzene	ND		ug/l	1.0	--
1,3-Dichlorobenzene	ND		ug/l	1.0	--
1,4-Dichlorobenzene	ND		ug/l	1.0	--
Methyl tert butyl ether	ND		ug/l	2.0	--
p/m-Xylene	ND		ug/l	2.0	--
o-Xylene	ND		ug/l	1.0	--
Xylenes, Total	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	1.0	--
1,2-Dichloroethene, Total	ND		ug/l	1.0	--
Dibromomethane	ND		ug/l	2.0	--
1,2,3-Trichloropropane	ND		ug/l	2.0	--
Styrene	ND		ug/l	1.0	--
Dichlorodifluoromethane	ND		ug/l	2.0	--
Acetone	ND		ug/l	5.0	--
Carbon disulfide	ND		ug/l	2.0	--
Methyl ethyl ketone	ND		ug/l	5.0	--
Methyl isobutyl ketone	ND		ug/l	5.0	--
2-Hexanone	ND		ug/l	5.0	--
Bromochloromethane	ND		ug/l	2.0	--
Tetrahydrofuran	ND		ug/l	2.0	--
2,2-Dichloropropane	ND		ug/l	2.0	--
1,2-Dibromoethane	ND		ug/l	2.0	--
1,3-Dichloropropane	ND		ug/l	2.0	--
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--
Bromobenzene	ND		ug/l	2.0	--
n-Butylbenzene	ND		ug/l	2.0	--
sec-Butylbenzene	ND		ug/l	2.0	--
tert-Butylbenzene	ND		ug/l	2.0	--
o-Chlorotoluene	ND		ug/l	2.0	--



Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2525107
Report Date: 05/05/25

Method Blank Analysis Batch Quality Control

Analytical Method: 141,8260D
Analytical Date: 05/01/25 06:33
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 02 Batch: WG2061094-5					
p-Chlorotoluene	ND		ug/l	2.0	--
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--
Hexachlorobutadiene	ND		ug/l	0.60	--
Isopropylbenzene	ND		ug/l	2.0	--
p-Isopropyltoluene	ND		ug/l	2.0	--
Naphthalene	ND		ug/l	2.0	--
n-Propylbenzene	ND		ug/l	2.0	--
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--
Diethyl ether	ND		ug/l	2.0	--
Diisopropyl Ether	ND		ug/l	2.0	--
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--
1,4-Dioxane	ND		ug/l	250	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	113		70-130



Lab Control Sample Analysis **Batch Quality Control**

Project Name: 50 TUFTS STREET

Project Number: 045163

Lab Number: L2525107

Report Date: 05/05/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01,03-04 Batch: WG2060421-3 WG2060421-4								
Methylene chloride	100		100		70-130	0		20
1,1-Dichloroethane	100		100		70-130	0		20
Chloroform	98		96		70-130	2		20
Carbon tetrachloride	100		100		70-130	0		20
1,2-Dichloropropane	110		100		70-130	10		20
Dibromochloromethane	89		90		70-130	1		20
1,1,2-Trichloroethane	93		89		70-130	4		20
Tetrachloroethene	88		86		70-130	2		20
Chlorobenzene	92		90		70-130	2		20
Trichlorofluoromethane	98		95		70-130	3		20
1,2-Dichloroethane	94		94		70-130	0		20
1,1,1-Trichloroethane	100		100		70-130	0		20
Bromodichloromethane	94		93		70-130	1		20
trans-1,3-Dichloropropene	87		86		70-130	1		20
cis-1,3-Dichloropropene	93		90		70-130	3		20
1,1-Dichloropropene	94		90		70-130	4		20
Bromoform	84		83		70-130	1		20
1,1,2,2-Tetrachloroethane	90		84		70-130	7		20
Benzene	97		95		70-130	2		20
Toluene	89		86		70-130	3		20
Ethylbenzene	88		85		70-130	3		20
Chloromethane	120		110		70-130	9		20
Bromomethane	62	Q	61	Q	70-130	2		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 50 TUFTS STREET

Project Number: 045163

Lab Number: L2525107

Report Date: 05/05/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01,03-04 Batch: WG2060421-3 WG2060421-4								
Vinyl chloride	82		79		70-130	4		20
Chloroethane	75		76		70-130	1		20
1,1-Dichloroethene	100		98		70-130	2		20
trans-1,2-Dichloroethene	98		97		70-130	1		20
Trichloroethene	94		94		70-130	0		20
1,2-Dichlorobenzene	91		86		70-130	6		20
1,3-Dichlorobenzene	90		87		70-130	3		20
1,4-Dichlorobenzene	91		86		70-130	6		20
Methyl tert butyl ether	97		92		70-130	5		20
p/m-Xylene	90		90		70-130	0		20
o-Xylene	90		90		70-130	0		20
cis-1,2-Dichloroethene	94		94		70-130	0		20
Dibromomethane	96		96		70-130	0		20
1,2,3-Trichloropropane	88		80		70-130	10		20
Styrene	85		85		70-130	0		20
Dichlorodifluoromethane	110		100		70-130	10		20
Acetone	110		110		70-130	0		20
Carbon disulfide	100		100		70-130	0		20
Methyl ethyl ketone	100		110		70-130	10		20
Methyl isobutyl ketone	87		86		70-130	1		20
2-Hexanone	87		86		70-130	1		20
Bromochloromethane	100		110		70-130	10		20
Tetrahydrofuran	120		110		70-130	9		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 50 TUFTS STREET

Project Number: 045163

Lab Number: L2525107

Report Date: 05/05/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01,03-04 Batch: WG2060421-3 WG2060421-4								
2,2-Dichloropropane	96		95		70-130	1		20
1,2-Dibromoethane	92		89		70-130	3		20
1,3-Dichloropropane	92		89		70-130	3		20
1,1,1,2-Tetrachloroethane	91		90		70-130	1		20
Bromobenzene	92		87		70-130	6		20
n-Butylbenzene	90		84		70-130	7		20
sec-Butylbenzene	92		86		70-130	7		20
tert-Butylbenzene	93		87		70-130	7		20
o-Chlorotoluene	90		84		70-130	7		20
p-Chlorotoluene	90		84		70-130	7		20
1,2-Dibromo-3-chloropropane	86		83		70-130	4		20
Hexachlorobutadiene	89		84		70-130	6		20
Isopropylbenzene	89		85		70-130	5		20
p-Isopropyltoluene	94		89		70-130	5		20
Naphthalene	93		89		70-130	4		20
n-Propylbenzene	88		84		70-130	5		20
1,2,3-Trichlorobenzene	88		85		70-130	3		20
1,2,4-Trichlorobenzene	87		83		70-130	5		20
1,3,5-Trimethylbenzene	91		86		70-130	6		20
1,2,4-Trimethylbenzene	90		86		70-130	5		20
Diethyl ether	110		110		70-130	0		20
Diisopropyl Ether	100		99		70-130	1		20
Ethyl-Tert-Butyl-Ether	95		91		70-130	4		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 50 TUFTS STREET

Project Number: 045163

Lab Number: L2525107

Report Date: 05/05/25

Parameter	LCS %Recovery	Qual	LCS %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01,03-04 Batch: WG2060421-3 WG2060421-4								
Tertiary-Amyl Methyl Ether	85		85		70-130	0		20
1,4-Dioxane	90		92		70-130	2		20

Surrogate	LCS %Recovery	Qual	LCS %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	100		105		70-130
Toluene-d8	98		99		70-130
4-Bromofluorobenzene	96		93		70-130
Dibromofluoromethane	105		105		70-130

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 50 TUFTS STREET

Project Number: 045163

Lab Number: L2525107

Report Date: 05/05/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 02 Batch: WG2061094-3 WG2061094-4								
Methylene chloride	99		97		70-130	2		20
1,1-Dichloroethane	100		100		70-130	0		20
Chloroform	94		97		70-130	3		20
Carbon tetrachloride	100		100		70-130	0		20
1,2-Dichloropropane	99		100		70-130	1		20
Dibromochloromethane	85		86		70-130	1		20
1,1,2-Trichloroethane	88		85		70-130	3		20
Tetrachloroethene	86		84		70-130	2		20
Chlorobenzene	88		88		70-130	0		20
Trichlorofluoromethane	96		94		70-130	2		20
1,2-Dichloroethane	89		92		70-130	3		20
1,1,1-Trichloroethane	100		100		70-130	0		20
Bromodichloromethane	97		94		70-130	3		20
trans-1,3-Dichloropropene	83		82		70-130	1		20
cis-1,3-Dichloropropene	90		91		70-130	1		20
1,1-Dichloropropene	93		94		70-130	1		20
Bromoform	80		80		70-130	0		20
1,1,2,2-Tetrachloroethane	80		83		70-130	4		20
Benzene	96		94		70-130	2		20
Toluene	86		84		70-130	2		20
Ethylbenzene	85		84		70-130	1		20
Chloromethane	120		120		70-130	0		20
Bromomethane	74		77		70-130	4		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 50 TUFTS STREET

Project Number: 045163

Lab Number: L2525107

Report Date: 05/05/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 02 Batch: WG2061094-3 WG2061094-4								
Vinyl chloride	78		77		70-130	1		20
Chloroethane	74		75		70-130	1		20
1,1-Dichloroethene	93		98		70-130	5		20
trans-1,2-Dichloroethene	95		96		70-130	1		20
Trichloroethene	95		94		70-130	1		20
1,2-Dichlorobenzene	85		86		70-130	1		20
1,3-Dichlorobenzene	85		85		70-130	0		20
1,4-Dichlorobenzene	86		86		70-130	0		20
Methyl tert butyl ether	89		89		70-130	0		20
p/m-Xylene	85		85		70-130	0		20
o-Xylene	85		85		70-130	0		20
cis-1,2-Dichloroethene	95		93		70-130	2		20
Dibromomethane	91		95		70-130	4		20
1,2,3-Trichloropropane	80		79		70-130	1		20
Styrene	85		80		70-130	6		20
Dichlorodifluoromethane	91		92		70-130	1		20
Acetone	100		90		70-130	11		20
Carbon disulfide	99		100		70-130	1		20
Methyl ethyl ketone	83		84		70-130	1		20
Methyl isobutyl ketone	78		77		70-130	1		20
2-Hexanone	79		80		70-130	1		20
Bromochloromethane	100		100		70-130	0		20
Tetrahydrofuran	100		110		70-130	10		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 50 TUFTS STREET

Project Number: 045163

Lab Number: L2525107

Report Date: 05/05/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 02 Batch: WG2061094-3 WG2061094-4								
2,2-Dichloropropane	95		96		70-130	1		20
1,2-Dibromoethane	86		87		70-130	1		20
1,3-Dichloropropane	88		85		70-130	3		20
1,1,1,2-Tetrachloroethane	87		87		70-130	0		20
Bromobenzene	87		86		70-130	1		20
n-Butylbenzene	85		86		70-130	1		20
sec-Butylbenzene	86		86		70-130	0		20
tert-Butylbenzene	88		88		70-130	0		20
o-Chlorotoluene	84		84		70-130	0		20
p-Chlorotoluene	85		85		70-130	0		20
1,2-Dibromo-3-chloropropane	81		88		70-130	8		20
Hexachlorobutadiene	82		84		70-130	2		20
Isopropylbenzene	85		85		70-130	0		20
p-Isopropyltoluene	90		90		70-130	0		20
Naphthalene	87		88		70-130	1		20
n-Propylbenzene	85		85		70-130	0		20
1,2,3-Trichlorobenzene	84		85		70-130	1		20
1,2,4-Trichlorobenzene	82		84		70-130	2		20
1,3,5-Trimethylbenzene	86		86		70-130	0		20
1,2,4-Trimethylbenzene	87		86		70-130	1		20
Diethyl ether	100		100		70-130	0		20
Diisopropyl Ether	100		99		70-130	1		20
Ethyl-Tert-Butyl-Ether	90		88		70-130	2		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 50 TUFTS STREET

Project Number: 045163

Lab Number: L2525107

Report Date: 05/05/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 02 Batch: WG2061094-3 WG2061094-4								
Tertiary-Amyl Methyl Ether	82		82		70-130	0		20
1,4-Dioxane	88		88		70-130	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	97		98		70-130
Toluene-d8	95		97		70-130
4-Bromofluorobenzene	92		92		70-130
Dibromofluoromethane	105		108		70-130

Project Name: 50 TUFTS STREET**Lab Number:** L2525107**Project Number:** 045163**Report Date:** 05/05/25**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information**Cooler** **Custody Seal**

A Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2525107-01A	Vial HCl preserved	A	NA		2.5	Y	Absent		MCP-8260-21(14)
L2525107-01B	Vial HCl preserved	A	NA		2.5	Y	Absent		MCP-8260-21(14)
L2525107-01C	Vial HCl preserved	A	NA		2.5	Y	Absent		MCP-8260-21(14)
L2525107-02A	Vial HCl preserved	A	NA		2.5	Y	Absent		MCP-8260-21(14)
L2525107-02B	Vial HCl preserved	A	NA		2.5	Y	Absent		MCP-8260-21(14)
L2525107-02C	Vial HCl preserved	A	NA		2.5	Y	Absent		MCP-8260-21(14)
L2525107-03A	Vial HCl preserved	A	NA		2.5	Y	Absent		MCP-8260-21(14)
L2525107-03B	Vial HCl preserved	A	NA		2.5	Y	Absent		MCP-8260-21(14)
L2525107-03C	Vial HCl preserved	A	NA		2.5	Y	Absent		MCP-8260-21(14)
L2525107-04A	Vial HCl preserved	A	NA		2.5	Y	Absent		MCP-8260-21(14)
L2525107-04B	Vial HCl preserved	A	NA		2.5	Y	Absent		MCP-8260-21(14)
L2525107-04C	Vial HCl preserved	A	NA		2.5	Y	Absent		MCP-8260-21(14)

Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2525107
Report Date: 05/05/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report



Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2525107
Report Date: 05/05/25

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

Report Format: Data Usability Report



Project Name: 50 TUFTS STREET
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Lab Number: L2525107
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Data Qualifiers

- ND** - Not detected at the reporting limit (RL) for the sample.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: 50 TUFTS STREET**Lab Number:** L2525107**Project Number:** 045163**Report Date:** 05/05/25

REFERENCES

- 141 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA and IIB, November 2021.

LIMITATION OF LIABILITIES

Pace Analytical Services performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Pace Analytical Services shall be to re-perform the work at it's own expense. In no event shall Pace Analytical Services be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Pace Analytical Services.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Pace Analytical Services LLCFacility: **Northeast**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

Revision 27

Published Date: 01/24/2025

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Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**EPA 624.1:** m/p-xylene, o-xylene, Naphthalene**EPA 625.1:** alpha-Terpineol**EPA 8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****SM 2540D:** TSS.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

MADEP-APH.**Nonpotable Water:** EPA RSK-175 Dissolved Gases**Biological Tissue Matrix:** EPA 3050B**Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048****EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048**Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)**

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables).**Microbiology:** SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg. EPA 522, EPA 537.1.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1 Hg.****SM2340B**

Pace Analytical Services LLCID No.: **17873**Facility: **Northeast**

Revision 27

Department: **Quality Assurance**

Published Date: 01/24/2025

Title: **Certificate/Approval Program Summary**

Page 2 of 2

Certification IDs:**Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**

CT PH-0826, IL 200077, IN C-MA-03, KY JY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 3090, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048

ANAB/DoD L2474, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

For a complete listing of analytes and methods, please contact your Project Manager.

L2525107



**400 Unicorn Park Drive
Woburn, MA 01801
PH: 781.721.4000**

Project Information

Project Name: Tufts St

Project Number: 045163

Send Report to:
LABDATA@geiconsultants.com
MFORREST@geiconsultants.com

Project Location: Somerville, MA

Project Manager: Chris Conner CCONNER@jciconsultants.com

Page | of

Sample Handling

Samples Field
Filtered

YES ☒ NO ☐ NA ☐

Sampled Shipped
With Ice

(YES) NO

Sample	Sample Specific Remarks
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MCP PRESUMPTIVE CERTAINTY AND

MCP ANALYTICAL METHODS REQUIRED:

☒ YES ☐ NO

STATE AND FEDERAL REGULATORY REQUIREMENTS/REPORT LIMITS

State/Federal Program: (MA) 401WQC Other _____ NH RI CT NY ME

MA MCP Criteria are Method 1 S-1 and GW-2/GW-3. Circle if GW-1 is required.

[illegible]

Relinquished by sampler; (signature)

Date :

Time¹

Received by: (signature)

Relinquished by sampler: (signature)

Date :

Time:

Revised by [illegible]

Reinquished by: (signature)

Date:

Tienari

2. 2000

Relinquished by: (signature)

Date :

Figure 4

3. W 1 1

Relinquished by: (signature)

Date:

Time:

4. ✓✓✓✓

Turnaround Time
(Business days):

Normal X 4-Day _____ 3-Day _____
2-Day _____ 1-Day _____ Other _____

Before submitting rush turnaround samples, you **must** notify the laboratory to confirm that the TAT can be achieved.

Additional Requirements/Comments/Remarks:

Method Blank Summary Form 4 Volatiles

Client	: GEI Consultants	Lab Number	: L2525107
Project Name	: 50 TUFTS STREET	Project Number	: 045163
Lab Sample ID	: WG2060421-5	Lab File ID	: J250429B05
Instrument ID	: JACK		
Matrix	: WATER	Analysis Date	: 04/29/25 06:25

Client Sample No.	Lab Sample ID	Analysis Date
WG2060421-3LCS	WG2060421-3	04/29/25 04:38
WG2060421-4LCSD	WG2060421-4	04/29/25 05:04
045163-MW103	L2525107-04	04/29/25 12:41
045163-MW121D	L2525107-03	04/29/25 13:08
045163-MW102	L2525107-01	04/29/25 13:35
MW-6D-20250421MS	WG2060421-6	04/29/25 14:55
MW-6D-20250421MSD	WG2060421-7	04/29/25 15:22

Method Blank Summary

Form 4

Volatiles

Client	: GEI Consultants	Lab Number	: L2525107
Project Name	: 50 TUFTS STREET	Project Number	: 045163
Lab Sample ID	: WG2061094-5	Lab File ID	: J250501B05
Instrument ID	: JACK		
Matrix	: WATER	Analysis Date	: 05/01/25 06:33

Client Sample No.	Lab Sample ID	Analysis Date
WG2061094-3LCS	WG2061094-3	05/01/25 04:46
WG2061094-4LCSD	WG2061094-4	05/01/25 05:13
045163-MW121S	L2525107-02	05/01/25 07:00

Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : 50 TUFTS STREET
 Instrument ID : JACK
 Lab File ID : J250429B01
 Sample No : WG2060421-2
 Channel :

Lab Number : L2525107
 Project Number : 045163
 Calibration Date : 04/29/25 04:38
 Init. Calib. Date(s) : 02/28/25 02/28/25
 Init. Calib. Times : 05:35 08:42

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	107	0
Dichlorodifluoromethane	0.28	0.305	-	-8.9	20	113	0
Chloromethane	0.294	0.354	-	-20.4*	20	128	0
Vinyl chloride	0.352	0.288	-	18.2	20	84	0
Bromomethane	0.178	0.111	-	37.6*	20	69	0
Chloroethane	0.189	0.142	-	24.9*	20	78	0
Trichlorofluoromethane	0.411	0.403	-	1.9	20	101	0
Ethyl ether	0.116	0.127	-	-9.5	20	114	0
1,1-Dichloroethene	0.228	0.227	-	0.4	20	106	0
Carbon disulfide	0.7	0.718	-	-2.6	20	109	0
Freon-113	0.246	0.25	-	-1.6	20	108	0
Acrolein	0.041	0.043	-	-4.9	20	119	0
Methylene chloride	0.247	0.251	-	-1.6	20	109	0
Acetone	0.077	0.088	-	-14.3	20	128	0
trans-1,2-Dichloroethene	0.247	0.243	-	1.6	20	102	0
Methyl acetate	0.167	0.19	-	-13.8	20	125	0
Methyl tert-butyl ether	0.682	0.66	-	3.2	20	103	0
tert-Butyl alcohol	0.026	0.026	-	0	20	93	0
Diisopropyl ether	0.875	0.916	-	-4.7	20	112	0
1,1-Dichloroethane	0.492	0.498	-	-1.2	20	108	0
Halothane	0.201	0.2	-	0.5	20	104	0
Acrylonitrile	0.082	0.096	-	-17.1	20	123	0
Ethyl tert-butyl ether	0.785	0.743	-	5.4	20	102	0
Vinyl acetate	0.688	0.622	-	9.6	20	99	0
cis-1,2-Dichloroethene	0.272	0.257	-	5.5	20	100	0
2,2-Dichloropropane	0.423	0.407	-	3.8	20	104	0
Bromochloromethane	0.122	0.127	-	-4.1	20	106	0
Cyclohexane	0.51	0.499	-	2.2	20	105	0
Chloroform	0.462	0.451	-	2.4	20	106	0
Ethyl acetate	0.269	0.28	-	-4.1	20	110	0
Carbon tetrachloride	0.363	0.372	-	-2.5	20	106	0
Tetrahydrofuran	0.095	0.115	-	-21.1*	20	125	-.01
Dibromofluoromethane	0.264	0.277	-	-4.9	20	111	0
1,1,1-Trichloroethane	0.408	0.418	-	-2.5	20	109	0
2-Butanone	0.121	0.121	-	0	20	110	0
1,1-Dichloropropene	0.335	0.314	-	6.3	20	98	0
Benzene	1.011	0.983	-	2.8	20	105	0
tert-Amyl methyl ether	0.688	0.586	-	14.8	20	90	0
1,2-Dichloroethane-d4	0.324	0.324	-	0	20	108	0
1,2-Dichloroethane	0.355	0.336	-	5.4	20	100	0
Methyl cyclohexane	0.47	0.432	-	8.1	20	102	0
Trichloroethene	0.271	0.254	-	6.3	20	99	0
Dibromomethane	0.153	0.148	-	3.3	20	100	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : 50 TUFTS STREET
 Instrument ID : JACK
 Lab File ID : J250429B01
 Sample No : WG2060421-2
 Channel :

Lab Number : L2525107
 Project Number : 045163
 Calibration Date : 04/29/25 04:38
 Init. Calib. Date(s) : 02/28/25 02/28/25
 Init. Calib. Times : 05:35 08:42

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,2-Dichloropropane	0.262	0.28	-	-6.9	20	106	0
2-Chloroethyl vinyl ether	0.159	0.136	-	14.5	20	86	0
Bromodichloromethane	0.344	0.323	-	6.1	20	96	0
1,4-Dioxane	0.00217	0.00194*	-	10.6	20	97	-.01
cis-1,3-Dichloropropene	0.409	0.38	-	7.1	20	94	0
Chlorobenzene-d5	1	1	-	0	20	111	0
Toluene-d8	1.318	1.296	-	1.7	20	109	0
Toluene	0.882	0.789	-	10.5	20	99	0
4-Methyl-2-pentanone	0.125	0.108	-	13.6	20	92	0
Tetrachloroethene	0.411	0.364	-	11.4	20	98	0
trans-1,3-Dichloropropene	0.495	0.431	-	12.9	20	92	0
Ethyl methacrylate	0.424	0.348	-	17.9	20	86	0
1,1,2-Trichloroethane	0.262	0.244	-	6.9	20	95	-.01
Chlorodibromomethane	0.365	0.327	-	10.4	20	95	0
1,3-Dichloropropane	0.486	0.449	-	7.6	20	99	0
1,2-Dibromoethane	0.295	0.27	-	8.5	20	96	0
2-Hexanone	0.255	0.223	-	12.5	20	90	0
Chlorobenzene	0.973	0.895	-	8	20	98	0
Ethylbenzene	1.752	1.541	-	12	20	96	0
1,1,1,2-Tetrachloroethane	0.357	0.324	-	9.2	20	96	0
p/m Xylene	0.685	0.618	-	9.8	20	100	0
o Xylene	0.658	0.592	-	10	20	98	0
Styrene	1.121	0.968	-	13.6	20	93	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	112	0
Bromoform	0.441	0.37	-	16.1	20	87	0
Isopropylbenzene	3.009	2.678	-	11	20	97	0
4-Bromofluorobenzene	0.855	0.817	-	4.4	20	108	0
Bromobenzene	0.72	0.66	-	8.3	20	96	0
n-Propylbenzene	3.645	3.205	-	12.1	20	96	0
1,4-Dichlorobutane	0.953	0.923	-	3.1	20	105	0
1,1,2,2-Tetrachloroethane	0.7	0.628	-	10.3	20	91	0
4-Ethyltoluene	2.97	2.699	-	9.1	20	99	0
2-Chlorotoluene	2.404	2.155	-	10.4	20	98	0
1,3,5-Trimethylbenzene	2.587	2.351	-	9.1	20	100	0
1,2,3-Trichloropropane	0.56	0.493	-	12	20	92	0
trans-1,4-Dichloro-2-buten	0.238	0.207	-	13	20	89	0
4-Chlorotoluene	2.179	1.958	-	10.1	20	97	0
tert-Butylbenzene	2.151	1.999	-	7.1	20	102	0
1,2,4-Trimethylbenzene	2.516	2.27	-	9.8	20	98	0
sec-Butylbenzene	3.283	3.011	-	8.3	20	101	0
p-Isopropyltoluene	2.792	2.638	-	5.5	20	103	0
1,3-Dichlorobenzene	1.47	1.32	-	10.2	20	96	0
1,4-Dichlorobenzene	1.47	1.342	-	8.7	20	98	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : 50 TUFTS STREET
 Instrument ID : JACK
 Lab File ID : J250429B01
 Sample No : WG2060421-2
 Channel :

Lab Number : L2525107
 Project Number : 045163
 Calibration Date : 04/29/25 04:38
 Init. Calib. Date(s) : 02/28/25 02/28/25
 Init. Calib. Times : 05:35 08:42

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
p-Diethylbenzene	1.637	1.554	-	5.1	20	104	0
n-Butylbenzene	2.502	2.251	-	10	20	100	0
1,2-Dichlorobenzene	1.362	1.237	-	9.2	20	97	0
1,2,4,5-Tetramethylbenzene	2.513	2.239	-	10.9	20	99	0
1,2-Dibromo-3-chloropropan	0.133	0.114	-	14.3	20	91	0
1,3,5-Trichlorobenzene	1.072	0.97	-	9.5	20	99	0
Hexachlorobutadiene	0.458	0.408	-	10.9	20	103	0
1,2,4-Trichlorobenzene	0.948	0.825	-	13	20	96	0
Naphthalene	2.388	2.225	-	6.8	20	101	0
1,2,3-Trichlorobenzene	0.868	0.761	-	12.3	20	95	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : 50 TUFTS STREET
 Instrument ID : JACK
 Lab File ID : J250501B01
 Sample No : WG2061094-2
 Channel :

Lab Number : L2525107
 Project Number : 045163
 Calibration Date : 05/01/25 04:46
 Init. Calib. Date(s) : 02/28/25 02/28/25
 Init. Calib. Times : 05:35 08:42

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	105	0
Dichlorodifluoromethane	0.28	0.254	-	9.3	20	93	0
Chloromethane	0.294	0.348	-	-18.4	20	124	0
Vinyl chloride	0.352	0.276	-	21.6*	20	80	0
Bromomethane	0.178	0.131	-	26.4*	20	80	0
Chloroethane	0.189	0.139	-	26.5*	20	75	0
Trichlorofluoromethane	0.411	0.392	-	4.6	20	96	0
Ethyl ether	0.116	0.117	-	-0.9	20	104	0
1,1-Dichloroethene	0.228	0.213	-	6.6	20	98	0
Carbon disulfide	0.7	0.69	-	1.4	20	104	0
Freon-113	0.246	0.239	-	2.8	20	101	0
Acrolein	0.041	0.041	-	0	20	111	0
Methylene chloride	0.247	0.245	-	0.8	20	105	0
Acetone	0.077	0.078	-	-1.3	20	110	0
trans-1,2-Dichloroethene	0.247	0.235	-	4.9	20	98	0
Methyl acetate	0.167	0.178	-	-6.6	20	115	0
Methyl tert-butyl ether	0.682	0.604	-	11.4	20	93	0
tert-Butyl alcohol	0.026	0.022	-	15.4	20	78	0
Diisopropyl ether	0.875	0.89	-	-1.7	20	107	0
1,1-Dichloroethane	0.492	0.497	-	-1	20	106	0
Halothane	0.201	0.201	-	0	20	103	0
Acrylonitrile	0.082	0.084	-	-2.4	20	106	0
Ethyl tert-butyl ether	0.785	0.707	-	9.9	20	96	0
Vinyl acetate	0.688	0.579	-	15.8	20	90	0
cis-1,2-Dichloroethene	0.272	0.258	-	5.1	20	99	0
2,2-Dichloropropane	0.423	0.4	-	5.4	20	101	0
Bromochloromethane	0.122	0.122	-	0	20	101	0
Cyclohexane	0.51	0.507	-	0.6	20	105	0
Chloroform	0.462	0.435	-	5.8	20	101	0
Ethyl acetate	0.269	0.258	-	4.1	20	100	0
Carbon tetrachloride	0.363	0.365	-	-0.6	20	102	0
Tetrahydrofuran	0.095	0.097	-	-2.1	20	104	0
Dibromofluoromethane	0.264	0.277	-	-4.9	20	109	0
1,1,1-Trichloroethane	0.408	0.41	-	-0.5	20	105	0
2-Butanone	0.121	0.1	-	17.4	20	89	0
1,1-Dichloropropene	0.335	0.311	-	7.2	20	96	0
Benzene	1.011	0.968	-	4.3	20	102	0
tert-Amyl methyl ether	0.688	0.563	-	18.2	20	85	0
1,2-Dichloroethane-d4	0.324	0.315	-	2.8	20	104	0
1,2-Dichloroethane	0.355	0.317	-	10.7	20	93	0
Methyl cyclohexane	0.47	0.435	-	7.4	20	101	0
Trichloroethene	0.271	0.258	-	4.8	20	99	0
Dibromomethane	0.153	0.139	-	9.2	20	92	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : 50 TUFTS STREET
 Instrument ID : JACK
 Lab File ID : J250501B01
 Sample No : WG2061094-2
 Channel :

Lab Number : L2525107
 Project Number : 045163
 Calibration Date : 05/01/25 04:46
 Init. Calib. Date(s) : 02/28/25 02/28/25
 Init. Calib. Times : 05:35 08:42

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,2-Dichloropropane	0.262	0.26	-	0.8	20	97	0
2-Chloroethyl vinyl ether	0.159	0.122	-	23.3*	20	76	0
Bromodichloromethane	0.344	0.333	-	3.2	20	97	0
1,4-Dioxane	0.00217	0.00191*	-	12	20	94	0
cis-1,3-Dichloropropene	0.409	0.37	-	9.5	20	90	0
Chlorobenzene-d5	1	1	-	0	20	111	0
Toluene-d8	1.318	1.258	-	4.6	20	106	0
Toluene	0.882	0.759	-	13.9	20	96	0
4-Methyl-2-pentanone	0.125	0.097	-	22.4*	20	83	0
Tetrachloroethene	0.411	0.352	-	14.4	20	95	0
trans-1,3-Dichloropropene	0.495	0.41	-	17.2	20	88	0
Ethyl methacrylate	0.424	0.328	-	22.6*	20	81	0
1,1,2-Trichloroethane	0.262	0.23	-	12.2	20	90	0
Chlorodibromomethane	0.365	0.312	-	14.5	20	91	0
1,3-Dichloropropane	0.486	0.428	-	11.9	20	94	0
1,2-Dibromoethane	0.295	0.252	-	14.6	20	90	0
2-Hexanone	0.255	0.203	-	20.4*	20	82	0
Chlorobenzene	0.973	0.86	-	11.6	20	94	0
Ethylbenzene	1.752	1.483	-	15.4	20	93	0
1,1,1,2-Tetrachloroethane	0.357	0.31	-	13.2	20	93	0
p/m Xylene	0.685	0.595	-	13.1	20	96	0
o Xylene	0.658	0.57	-	13.4	20	95	0
Styrene	1.121	0.936	-	16.5	20	91	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	113	0
Bromoform	0.441	0.352	-	20.2*	20	83	0
Isopropylbenzene	3.009	2.559	-	15	20	93	0
4-Bromofluorobenzene	0.855	0.783	-	8.4	20	105	0
Bromobenzene	0.72	0.625	-	13.2	20	92	0
n-Propylbenzene	3.645	3.089	-	15.3	20	93	0
1,4-Dichlorobutane	0.953	0.837	-	12.2	20	96	0
1,1,2,2-Tetrachloroethane	0.7	0.558	-	20.3*	20	82	0
4-Ethyltoluene	2.97	2.601	-	12.4	20	96	0
2-Chlorotoluene	2.404	2.023	-	15.8	20	92	0
1,3,5-Trimethylbenzene	2.587	2.231	-	13.8	20	96	0
1,2,3-Trichloropropane	0.56	0.449	-	19.8	20	85	0
trans-1,4-Dichloro-2-buten	0.238	0.188	-	21*	20	82	0
4-Chlorotoluene	2.179	1.852	-	15	20	92	0
tert-Butylbenzene	2.151	1.904	-	11.5	20	98	0
1,2,4-Trimethylbenzene	2.516	2.187	-	13.1	20	95	0
sec-Butylbenzene	3.283	2.837	-	13.6	20	96	0
p-Isopropyltoluene	2.792	2.503	-	10.4	20	99	0
1,3-Dichlorobenzene	1.47	1.25	-	15	20	92	0
1,4-Dichlorobenzene	1.47	1.26	-	14.3	20	92	0

* Value outside of QC limits.

Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : 50 TUFTS STREET
 Instrument ID : JACK
 Lab File ID : J250501B01
 Sample No : WG2061094-2
 Channel :

Lab Number : L2525107
 Project Number : 045163
 Calibration Date : 05/01/25 04:46
 Init. Calib. Date(s) : 02/28/25 02/28/25
 Init. Calib. Times : 05:35 08:42

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
p-Diethylbenzene	1.637	1.476	-	9.8	20	99	0
n-Butylbenzene	2.502	2.134	-	14.7	20	95	0
1,2-Dichlorobenzene	1.362	1.16	-	14.8	20	92	0
1,2,4,5-Tetramethylbenzene	2.513	2.13	-	15.2	20	95	0
1,2-Dibromo-3-chloropropan	0.133	0.107	-	19.5	20	86	0
1,3,5-Trichlorobenzene	1.072	0.912	-	14.9	20	94	0
Hexachlorobutadiene	0.458	0.378	-	17.5	20	96	0
1,2,4-Trichlorobenzene	0.948	0.776	-	18.1	20	91	0
Naphthalene	2.388	2.082	-	12.8	20	95	0
1,2,3-Trichlorobenzene	0.868	0.734	-	15.4	20	93	0

* Value outside of QC limits.



ANALYTICAL REPORT

Lab Number:	L2525589
Client:	GEI Consultants 400 Unicorn Park Drive Woburn, MA 01801
ATTN:	Chris Coner
Phone:	(781) 721-4000
Project Name:	50 TUFTS STREET
Project Number:	045163
Report Date:	05/15/25

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: 50 TUFTS STREET**Project Number:** 045163**Lab Number:** L2525589**Report Date:** 05/15/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2525589-01	045163-MW116	WATER	SOMERVILLE, MASSACHUSETTS	04/24/25 09:25	04/25/25
L2525589-02	045163-MW900	WATER	SOMERVILLE, MASSACHUSETTS	04/24/25 12:00	04/25/25
L2525589-03	045163-MW203R	WATER	SOMERVILLE, MASSACHUSETTS	04/24/25 10:25	04/25/25
L2525589-04	045163-SHMW-2R	WATER	SOMERVILLE, MASSACHUSETTS	04/24/25 10:35	04/25/25
L2525589-05	045163-MW111R	WATER	SOMERVILLE, MASSACHUSETTS	04/24/25 08:20	04/25/25
L2525589-06	045163-MW122	WATER	SOMERVILLE, MASSACHUSETTS	04/24/25 13:10	04/25/25

Project Name: 50 TUFTS STREET

Lab Number: L2525589

Project Number: 045163

Report Date: 05/15/25

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES
A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	NO
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	NO
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	YES
For any questions answered "No", please refer to the case narrative section on the following page(s).		

Please note that sample matrix information is located in the Sample Results section of this report.



Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2525589
Report Date: 05/15/25

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Pace Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Pace's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Pace Project Manager and made arrangements for Pace to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2525589
Report Date: 05/15/25

Case Narrative (continued)

MCP Related Narratives

Volatile Organics

In reference to question G:

L2525589-03D, -04D, and -06D: One or more of the target analytes did not achieve the requested CAM reporting limits.

In reference to question H:

L2525589-03D, -04D, and -05: Initial Calibration did not meet:

Lowest Calibration Standard Minimum Response Factor: bromodichloromethane (0.2792), 1,4-dioxane (0.0007), cis-1,3-dichloropropene (0.2482), trans-1,3-dichloropropene (0.2759)

Average Response: bromodichloromethane, 1,4-dioxane, cis-1,3-dichloropropene, trans-1,3-dichloropropene, 1,1,2-trichloroethane

L2525589-06D: Initial Calibration did not meet:

Lowest Calibration Standard Minimum Response Factor: bromodichloromethane (0.2427), 1,4-dioxane (0.0016)

Average Response Factor: bromodichloromethane, 1,4-dioxane

L2525589-01 and -02: Initial Calibration did not meet:

Lowest Calibration Standard Minimum Response Factor: 1,4-dioxane (0.0019)

Average Response Factor: 1,4-dioxane

Verification: dichlorodifluoromethane (136%)

L2525589-01 through -06D: The associated continuing calibration standard is outside the acceptance criteria for several compounds; however, it is within overall method allowances. Associated results are considered to be biased high if the %D is negative and biased low if the %D is positive. A copy of the continuing calibration standard is included as an addendum to this report.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

Melissa Sturgis Melissa Sturgis

Title: Technical Director/Representative

Date: 05/15/25

QC OUTLIER SUMMARY REPORT

Project Name: 50 TUFTS STREET

Project Number: 045163

Lab Number: L2525589

Report Date: 05/15/25

Method	Client ID (Native ID)	Lab ID	Parameter	QC Type	Recovery/RPD (%)	QC Limits (%)	Associated Samples	Data Quality Assessment
MCP Volatile Organics - Westborough Lab								
8260D	Batch QC	WG2062971-3	Chloromethane	LCS	60	70-130	03-05	potential low bias
8260D	Batch QC	WG2062971-3	Methyl ethyl ketone	LCS	63	70-130	03-05	potential low bias
8260D	Batch QC	WG2062971-3	2-Hexanone	LCS	63	70-130	03-05	potential low bias
8260D	Batch QC	WG2062971-3	Tetrahydrofuran	LCS	67	70-130	03-05	potential low bias
8260D	Batch QC	WG2062971-4	Chloromethane	LCSD	63	70-130	03-05	potential low bias
8260D	Batch QC	WG2062971-4	Methyl ethyl ketone	LCSD	68	70-130	03-05	potential low bias
8260D	Batch QC	WG2062971-4	2-Hexanone	LCSD	67	70-130	03-05	potential low bias
8260D	Batch QC	WG2063977-3	Bromomethane	LCS	46	70-130	06	potential low bias
8260D	Batch QC	WG2063977-4	Bromomethane	LCSD	49	70-130	06	potential low bias

ORGANICS

VOLATILES

Project Name: 50 TUFTS STREET**Lab Number:** L2525589**Project Number:** 045163**Report Date:** 05/15/25**SAMPLE RESULTS**

Lab ID: L2525589-01
 Client ID: 045163-MW116
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/24/25 09:25
 Date Received: 04/25/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water

Analytical Method: 141,8260D

Analytical Date: 05/08/25 09:01

Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	26		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	160		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	2.6		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	61		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	22		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: 50 TUFTS STREET**Lab Number:** L2525589**Project Number:** 045163**Report Date:** 05/15/25**SAMPLE RESULTS****Lab ID:** L2525589-01**Date Collected:** 04/24/25 09:25**Client ID:** 045163-MW116**Date Received:** 04/25/25**Sample Location:** SOMERVILLE, MASSACHUSETTS**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	68		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	110		ug/l	1.0	--	1
1,2-Dichloroethene, Total	110		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: 50 TUFTS STREET**Lab Number:** L2525589**Project Number:** 045163**Report Date:** 05/15/25**SAMPLE RESULTS****Lab ID:** L2525589-01**Date Collected:** 04/24/25 09:25**Client ID:** 045163-MW116**Date Received:** 04/25/25**Sample Location:** SOMERVILLE, MASSACHUSETTS**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	108		70-130

Project Name: 50 TUFTS STREET**Lab Number:** L2525589**Project Number:** 045163**Report Date:** 05/15/25**SAMPLE RESULTS**

Lab ID: L2525589-02
 Client ID: 045163-MW900
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/24/25 12:00
 Date Received: 04/25/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 141,8260D
 Analytical Date: 05/08/25 08:34
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	25		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	150		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	2.6		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	61		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	22		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: 50 TUFTS STREET**Lab Number:** L2525589**Project Number:** 045163**Report Date:** 05/15/25**SAMPLE RESULTS**

Lab ID: L2525589-02
 Client ID: 045163-MW900
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/24/25 12:00
 Date Received: 04/25/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	66		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	110		ug/l	1.0	--	1
1,2-Dichloroethene, Total	110		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: 50 TUFTS STREET**Lab Number:** L2525589**Project Number:** 045163**Report Date:** 05/15/25**SAMPLE RESULTS****Lab ID:** L2525589-02**Date Collected:** 04/24/25 12:00**Client ID:** 045163-MW900**Date Received:** 04/25/25**Sample Location:** SOMERVILLE, MASSACHUSETTS**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	107		70-130

Project Name: 50 TUFTS STREET**Lab Number:** L2525589**Project Number:** 045163**Report Date:** 05/15/25**SAMPLE RESULTS**

Lab ID: L2525589-03 D
 Client ID: 045163-MW203R
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/24/25 10:25
 Date Received: 04/25/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water

Analytical Method: 141,8260D

Analytical Date: 05/06/25 09:34

Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	100	--	50
1,1-Dichloroethane	ND		ug/l	50	--	50
Chloroform	ND		ug/l	50	--	50
Carbon tetrachloride	ND		ug/l	50	--	50
1,2-Dichloropropane	ND		ug/l	50	--	50
Dibromochloromethane	ND		ug/l	50	--	50
1,1,2-Trichloroethane	ND		ug/l	50	--	50
Tetrachloroethene	5700		ug/l	50	--	50
Chlorobenzene	ND		ug/l	50	--	50
Trichlorofluoromethane	ND		ug/l	100	--	50
1,2-Dichloroethane	ND		ug/l	50	--	50
1,1,1-Trichloroethane	ND		ug/l	50	--	50
Bromodichloromethane	ND		ug/l	50	--	50
trans-1,3-Dichloropropene	ND		ug/l	20	--	50
cis-1,3-Dichloropropene	ND		ug/l	20	--	50
1,3-Dichloropropene, Total	ND		ug/l	20	--	50
1,1-Dichloropropene	ND		ug/l	100	--	50
Bromoform	ND		ug/l	100	--	50
1,1,2,2-Tetrachloroethane	ND		ug/l	50	--	50
Benzene	ND		ug/l	25	--	50
Toluene	ND		ug/l	50	--	50
Ethylbenzene	ND		ug/l	50	--	50
Chloromethane	ND		ug/l	100	--	50
Bromomethane	ND		ug/l	100	--	50
Vinyl chloride	ND		ug/l	50	--	50
Chloroethane	ND		ug/l	100	--	50
1,1-Dichloroethene	ND		ug/l	50	--	50
trans-1,2-Dichloroethene	ND		ug/l	50	--	50



Project Name: 50 TUFTS STREET**Lab Number:** L2525589**Project Number:** 045163**Report Date:** 05/15/25**SAMPLE RESULTS**

Lab ID: L2525589-03 D
 Client ID: 045163-MW203R
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/24/25 10:25
 Date Received: 04/25/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	110		ug/l	50	--	50
1,2-Dichlorobenzene	ND		ug/l	50	--	50
1,3-Dichlorobenzene	ND		ug/l	50	--	50
1,4-Dichlorobenzene	ND		ug/l	50	--	50
Methyl tert butyl ether	ND		ug/l	100	--	50
p/m-Xylene	ND		ug/l	100	--	50
o-Xylene	ND		ug/l	50	--	50
Xylenes, Total	ND		ug/l	50	--	50
cis-1,2-Dichloroethene	ND		ug/l	50	--	50
1,2-Dichloroethene, Total	ND		ug/l	50	--	50
Dibromomethane	ND		ug/l	100	--	50
1,2,3-Trichloropropane	ND		ug/l	100	--	50
Styrene	ND		ug/l	50	--	50
Dichlorodifluoromethane	ND		ug/l	100	--	50
Acetone	ND		ug/l	250	--	50
Carbon disulfide	ND		ug/l	100	--	50
Methyl ethyl ketone	ND		ug/l	250	--	50
Methyl isobutyl ketone	ND		ug/l	250	--	50
2-Hexanone	ND		ug/l	250	--	50
Bromochloromethane	ND		ug/l	100	--	50
Tetrahydrofuran	ND		ug/l	100	--	50
2,2-Dichloropropane	ND		ug/l	100	--	50
1,2-Dibromoethane	ND		ug/l	100	--	50
1,3-Dichloropropane	ND		ug/l	100	--	50
1,1,1,2-Tetrachloroethane	ND		ug/l	50	--	50
Bromobenzene	ND		ug/l	100	--	50
n-Butylbenzene	ND		ug/l	100	--	50
sec-Butylbenzene	ND		ug/l	100	--	50
tert-Butylbenzene	ND		ug/l	100	--	50
o-Chlorotoluene	ND		ug/l	100	--	50
p-Chlorotoluene	ND		ug/l	100	--	50
1,2-Dibromo-3-chloropropane	ND		ug/l	100	--	50
Hexachlorobutadiene	ND		ug/l	30	--	50
Isopropylbenzene	ND		ug/l	100	--	50
p-Isopropyltoluene	ND		ug/l	100	--	50
Naphthalene	ND		ug/l	100	--	50
n-Propylbenzene	ND		ug/l	100	--	50



Project Name: 50 TUFTS STREET**Lab Number:** L2525589**Project Number:** 045163**Report Date:** 05/15/25**SAMPLE RESULTS**

Lab ID: L2525589-03 D
 Client ID: 045163-MW203R
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/24/25 10:25
 Date Received: 04/25/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	100	--	50
1,2,4-Trichlorobenzene	ND		ug/l	100	--	50
1,3,5-Trimethylbenzene	ND		ug/l	100	--	50
1,2,4-Trimethylbenzene	ND		ug/l	100	--	50
Diethyl ether	ND		ug/l	100	--	50
Diisopropyl Ether	ND		ug/l	100	--	50
Ethyl-Tert-Butyl-Ether	ND		ug/l	100	--	50
Tertiary-Amyl Methyl Ether	ND		ug/l	100	--	50
1,4-Dioxane	ND		ug/l	12000	--	50

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	85		70-130
4-Bromofluorobenzene	81		70-130
Dibromofluoromethane	103		70-130

Project Name: 50 TUFTS STREET**Lab Number:** L2525589**Project Number:** 045163**Report Date:** 05/15/25**SAMPLE RESULTS**

Lab ID: L2525589-04 D
 Client ID: 045163-SHMW-2R
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/24/25 10:35
 Date Received: 04/25/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 141,8260D
 Analytical Date: 05/06/25 09:57
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	80	--	40
1,1-Dichloroethane	ND		ug/l	40	--	40
Chloroform	ND		ug/l	40	--	40
Carbon tetrachloride	ND		ug/l	40	--	40
1,2-Dichloropropane	ND		ug/l	40	--	40
Dibromochloromethane	ND		ug/l	40	--	40
1,1,2-Trichloroethane	ND		ug/l	40	--	40
Tetrachloroethene	3800		ug/l	40	--	40
Chlorobenzene	ND		ug/l	40	--	40
Trichlorofluoromethane	ND		ug/l	80	--	40
1,2-Dichloroethane	ND		ug/l	40	--	40
1,1,1-Trichloroethane	ND		ug/l	40	--	40
Bromodichloromethane	ND		ug/l	40	--	40
trans-1,3-Dichloropropene	ND		ug/l	16	--	40
cis-1,3-Dichloropropene	ND		ug/l	16	--	40
1,3-Dichloropropene, Total	ND		ug/l	16	--	40
1,1-Dichloropropene	ND		ug/l	80	--	40
Bromoform	ND		ug/l	80	--	40
1,1,2,2-Tetrachloroethane	ND		ug/l	40	--	40
Benzene	ND		ug/l	20	--	40
Toluene	ND		ug/l	40	--	40
Ethylbenzene	ND		ug/l	40	--	40
Chloromethane	ND		ug/l	80	--	40
Bromomethane	ND		ug/l	80	--	40
Vinyl chloride	ND		ug/l	40	--	40
Chloroethane	ND		ug/l	80	--	40
1,1-Dichloroethene	ND		ug/l	40	--	40
trans-1,2-Dichloroethene	ND		ug/l	40	--	40



Project Name: 50 TUFTS STREET**Lab Number:** L2525589**Project Number:** 045163**Report Date:** 05/15/25**SAMPLE RESULTS**

Lab ID: L2525589-04 D
 Client ID: 045163-SHMW-2R
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/24/25 10:35
 Date Received: 04/25/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	56		ug/l	40	--	40
1,2-Dichlorobenzene	ND		ug/l	40	--	40
1,3-Dichlorobenzene	ND		ug/l	40	--	40
1,4-Dichlorobenzene	ND		ug/l	40	--	40
Methyl tert butyl ether	ND		ug/l	80	--	40
p/m-Xylene	ND		ug/l	80	--	40
o-Xylene	ND		ug/l	40	--	40
Xylenes, Total	ND		ug/l	40	--	40
cis-1,2-Dichloroethene	ND		ug/l	40	--	40
1,2-Dichloroethene, Total	ND		ug/l	40	--	40
Dibromomethane	ND		ug/l	80	--	40
1,2,3-Trichloropropane	ND		ug/l	80	--	40
Styrene	ND		ug/l	40	--	40
Dichlorodifluoromethane	ND		ug/l	80	--	40
Acetone	ND		ug/l	200	--	40
Carbon disulfide	ND		ug/l	80	--	40
Methyl ethyl ketone	ND		ug/l	200	--	40
Methyl isobutyl ketone	ND		ug/l	200	--	40
2-Hexanone	ND		ug/l	200	--	40
Bromochloromethane	ND		ug/l	80	--	40
Tetrahydrofuran	ND		ug/l	80	--	40
2,2-Dichloropropane	ND		ug/l	80	--	40
1,2-Dibromoethane	ND		ug/l	80	--	40
1,3-Dichloropropane	ND		ug/l	80	--	40
1,1,1,2-Tetrachloroethane	ND		ug/l	40	--	40
Bromobenzene	ND		ug/l	80	--	40
n-Butylbenzene	ND		ug/l	80	--	40
sec-Butylbenzene	ND		ug/l	80	--	40
tert-Butylbenzene	ND		ug/l	80	--	40
o-Chlorotoluene	ND		ug/l	80	--	40
p-Chlorotoluene	ND		ug/l	80	--	40
1,2-Dibromo-3-chloropropane	ND		ug/l	80	--	40
Hexachlorobutadiene	ND		ug/l	24	--	40
Isopropylbenzene	ND		ug/l	80	--	40
p-Isopropyltoluene	ND		ug/l	80	--	40
Naphthalene	ND		ug/l	80	--	40
n-Propylbenzene	ND		ug/l	80	--	40



Project Name: 50 TUFTS STREET**Lab Number:** L2525589**Project Number:** 045163**Report Date:** 05/15/25**SAMPLE RESULTS**

Lab ID: L2525589-04 D
 Client ID: 045163-SHMW-2R
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/24/25 10:35
 Date Received: 04/25/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	80	--	40
1,2,4-Trichlorobenzene	ND		ug/l	80	--	40
1,3,5-Trimethylbenzene	ND		ug/l	80	--	40
1,2,4-Trimethylbenzene	ND		ug/l	80	--	40
Diethyl ether	ND		ug/l	80	--	40
Diisopropyl Ether	ND		ug/l	80	--	40
Ethyl-Tert-Butyl-Ether	ND		ug/l	80	--	40
Tertiary-Amyl Methyl Ether	ND		ug/l	80	--	40
1,4-Dioxane	ND		ug/l	10000	--	40

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		70-130
Toluene-d8	85		70-130
4-Bromofluorobenzene	84		70-130
Dibromofluoromethane	104		70-130

Project Name: 50 TUFTS STREET**Lab Number:** L2525589**Project Number:** 045163**Report Date:** 05/15/25**SAMPLE RESULTS**

Lab ID: L2525589-05
 Client ID: 045163-MW111R
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/24/25 08:20
 Date Received: 04/25/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water

Analytical Method: 141,8260D

Analytical Date: 05/06/25 09:11

Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	39		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1



Project Name: 50 TUFTS STREET**Lab Number:** L2525589**Project Number:** 045163**Report Date:** 05/15/25**SAMPLE RESULTS**

Lab ID: L2525589-05
 Client ID: 045163-MW111R
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/24/25 08:20
 Date Received: 04/25/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	2.4		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	2.8		ug/l	1.0	--	1
1,2-Dichloroethene, Total	2.8		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	6.9		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	4.9		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1



Project Name: 50 TUFTS STREET**Lab Number:** L2525589**Project Number:** 045163**Report Date:** 05/15/25**SAMPLE RESULTS****Lab ID:** L2525589-05**Date Collected:** 04/24/25 08:20**Client ID:** 045163-MW111R**Date Received:** 04/25/25**Sample Location:** SOMERVILLE, MASSACHUSETTS**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	88		70-130
4-Bromofluorobenzene	80		70-130
Dibromofluoromethane	103		70-130

Project Name: 50 TUFTS STREET**Lab Number:** L2525589**Project Number:** 045163**Report Date:** 05/15/25**SAMPLE RESULTS**

Lab ID: L2525589-06 D
 Client ID: 045163-MW122
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/24/25 13:10
 Date Received: 04/25/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water

Analytical Method: 141,8260D

Analytical Date: 05/06/25 13:39

Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	20	--	10
1,1-Dichloroethane	ND		ug/l	10	--	10
Chloroform	ND		ug/l	10	--	10
Carbon tetrachloride	ND		ug/l	10	--	10
1,2-Dichloropropane	ND		ug/l	10	--	10
Dibromochloromethane	ND		ug/l	10	--	10
1,1,2-Trichloroethane	ND		ug/l	10	--	10
Tetrachloroethene	840		ug/l	10	--	10
Chlorobenzene	ND		ug/l	10	--	10
Trichlorofluoromethane	ND		ug/l	20	--	10
1,2-Dichloroethane	ND		ug/l	10	--	10
1,1,1-Trichloroethane	ND		ug/l	10	--	10
Bromodichloromethane	ND		ug/l	10	--	10
trans-1,3-Dichloropropene	ND		ug/l	4.0	--	10
cis-1,3-Dichloropropene	ND		ug/l	4.0	--	10
1,3-Dichloropropene, Total	ND		ug/l	4.0	--	10
1,1-Dichloropropene	ND		ug/l	20	--	10
Bromoform	ND		ug/l	20	--	10
1,1,2,2-Tetrachloroethane	ND		ug/l	10	--	10
Benzene	ND		ug/l	5.0	--	10
Toluene	ND		ug/l	10	--	10
Ethylbenzene	ND		ug/l	10	--	10
Chloromethane	ND		ug/l	20	--	10
Bromomethane	ND		ug/l	20	--	10
Vinyl chloride	ND		ug/l	10	--	10
Chloroethane	ND		ug/l	20	--	10
1,1-Dichloroethene	ND		ug/l	10	--	10
trans-1,2-Dichloroethene	ND		ug/l	10	--	10



Project Name: 50 TUFTS STREET**Lab Number:** L2525589**Project Number:** 045163**Report Date:** 05/15/25**SAMPLE RESULTS**

Lab ID: L2525589-06 D
 Client ID: 045163-MW122
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/24/25 13:10
 Date Received: 04/25/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	100		ug/l	10	--	10
1,2-Dichlorobenzene	ND		ug/l	10	--	10
1,3-Dichlorobenzene	ND		ug/l	10	--	10
1,4-Dichlorobenzene	ND		ug/l	10	--	10
Methyl tert butyl ether	ND		ug/l	20	--	10
p/m-Xylene	ND		ug/l	20	--	10
o-Xylene	ND		ug/l	10	--	10
Xylenes, Total	ND		ug/l	10	--	10
cis-1,2-Dichloroethene	76		ug/l	10	--	10
1,2-Dichloroethene, Total	76		ug/l	10	--	10
Dibromomethane	ND		ug/l	20	--	10
1,2,3-Trichloropropane	ND		ug/l	20	--	10
Styrene	ND		ug/l	10	--	10
Dichlorodifluoromethane	ND		ug/l	20	--	10
Acetone	ND		ug/l	50	--	10
Carbon disulfide	ND		ug/l	20	--	10
Methyl ethyl ketone	ND		ug/l	50	--	10
Methyl isobutyl ketone	ND		ug/l	50	--	10
2-Hexanone	ND		ug/l	50	--	10
Bromochloromethane	ND		ug/l	20	--	10
Tetrahydrofuran	ND		ug/l	20	--	10
2,2-Dichloropropane	ND		ug/l	20	--	10
1,2-Dibromoethane	ND		ug/l	20	--	10
1,3-Dichloropropane	ND		ug/l	20	--	10
1,1,1,2-Tetrachloroethane	ND		ug/l	10	--	10
Bromobenzene	ND		ug/l	20	--	10
n-Butylbenzene	ND		ug/l	20	--	10
sec-Butylbenzene	ND		ug/l	20	--	10
tert-Butylbenzene	ND		ug/l	20	--	10
o-Chlorotoluene	ND		ug/l	20	--	10
p-Chlorotoluene	ND		ug/l	20	--	10
1,2-Dibromo-3-chloropropane	ND		ug/l	20	--	10
Hexachlorobutadiene	ND		ug/l	6.0	--	10
Isopropylbenzene	ND		ug/l	20	--	10
p-Isopropyltoluene	ND		ug/l	20	--	10
Naphthalene	ND		ug/l	20	--	10
n-Propylbenzene	ND		ug/l	20	--	10



Project Name: 50 TUFTS STREET**Lab Number:** L2525589**Project Number:** 045163**Report Date:** 05/15/25**SAMPLE RESULTS**

Lab ID: L2525589-06 D
 Client ID: 045163-MW122
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/24/25 13:10
 Date Received: 04/25/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	20	--	10
1,2,4-Trichlorobenzene	ND		ug/l	20	--	10
1,3,5-Trimethylbenzene	ND		ug/l	20	--	10
1,2,4-Trimethylbenzene	ND		ug/l	20	--	10
Diethyl ether	ND		ug/l	20	--	10
Diisopropyl Ether	ND		ug/l	20	--	10
Ethyl-Tert-Butyl-Ether	ND		ug/l	20	--	10
Tertiary-Amyl Methyl Ether	ND		ug/l	20	--	10
1,4-Dioxane	ND		ug/l	2500	--	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	88		70-130
Dibromofluoromethane	107		70-130

Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2525589
Report Date: 05/15/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 141,8260D
Analytical Date: 05/06/25 06:53
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 03-05 Batch: WG2062971-5					
Methylene chloride	ND		ug/l	2.0	--
1,1-Dichloroethane	ND		ug/l	1.0	--
Chloroform	ND		ug/l	1.0	--
Carbon tetrachloride	ND		ug/l	1.0	--
1,2-Dichloropropane	ND		ug/l	1.0	--
Dibromochloromethane	ND		ug/l	1.0	--
1,1,2-Trichloroethane	ND		ug/l	1.0	--
Tetrachloroethene	ND		ug/l	1.0	--
Chlorobenzene	ND		ug/l	1.0	--
Trichlorofluoromethane	ND		ug/l	2.0	--
1,2-Dichloroethane	ND		ug/l	1.0	--
1,1,1-Trichloroethane	ND		ug/l	1.0	--
Bromodichloromethane	ND		ug/l	1.0	--
trans-1,3-Dichloropropene	ND		ug/l	0.40	--
cis-1,3-Dichloropropene	ND		ug/l	0.40	--
1,3-Dichloropropene, Total	ND		ug/l	0.40	--
1,1-Dichloropropene	ND		ug/l	2.0	--
Bromoform	ND		ug/l	2.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--
Benzene	ND		ug/l	0.50	--
Toluene	ND		ug/l	1.0	--
Ethylbenzene	ND		ug/l	1.0	--
Chloromethane	ND		ug/l	2.0	--
Bromomethane	ND		ug/l	2.0	--
Vinyl chloride	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	2.0	--
1,1-Dichloroethene	ND		ug/l	1.0	--
trans-1,2-Dichloroethene	ND		ug/l	1.0	--
Trichloroethene	ND		ug/l	1.0	--



Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2525589
Report Date: 05/15/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 141,8260D
 Analytical Date: 05/06/25 06:53
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 03-05 Batch: WG2062971-5					
1,2-Dichlorobenzene	ND		ug/l	1.0	--
1,3-Dichlorobenzene	ND		ug/l	1.0	--
1,4-Dichlorobenzene	ND		ug/l	1.0	--
Methyl tert butyl ether	ND		ug/l	2.0	--
p/m-Xylene	ND		ug/l	2.0	--
o-Xylene	ND		ug/l	1.0	--
Xylenes, Total	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	1.0	--
1,2-Dichloroethene, Total	ND		ug/l	1.0	--
Dibromomethane	ND		ug/l	2.0	--
1,2,3-Trichloropropane	ND		ug/l	2.0	--
Styrene	ND		ug/l	1.0	--
Dichlorodifluoromethane	ND		ug/l	2.0	--
Acetone	ND		ug/l	5.0	--
Carbon disulfide	ND		ug/l	2.0	--
Methyl ethyl ketone	ND		ug/l	5.0	--
Methyl isobutyl ketone	ND		ug/l	5.0	--
2-Hexanone	ND		ug/l	5.0	--
Bromochloromethane	ND		ug/l	2.0	--
Tetrahydrofuran	ND		ug/l	2.0	--
2,2-Dichloropropane	ND		ug/l	2.0	--
1,2-Dibromoethane	ND		ug/l	2.0	--
1,3-Dichloropropane	ND		ug/l	2.0	--
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--
Bromobenzene	ND		ug/l	2.0	--
n-Butylbenzene	ND		ug/l	2.0	--
sec-Butylbenzene	ND		ug/l	2.0	--
tert-Butylbenzene	ND		ug/l	2.0	--
o-Chlorotoluene	ND		ug/l	2.0	--



Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2525589
Report Date: 05/15/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 141,8260D
Analytical Date: 05/06/25 06:53
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 03-05 Batch: WG2062971-5					
p-Chlorotoluene	ND		ug/l	2.0	--
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--
Hexachlorobutadiene	ND		ug/l	0.60	--
Isopropylbenzene	ND		ug/l	2.0	--
p-Isopropyltoluene	ND		ug/l	2.0	--
Naphthalene	ND		ug/l	2.0	--
n-Propylbenzene	ND		ug/l	2.0	--
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--
Diethyl ether	ND		ug/l	2.0	--
Diisopropyl Ether	ND		ug/l	2.0	--
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--
1,4-Dioxane	ND		ug/l	250	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	86		70-130
Dibromofluoromethane	93		70-130



Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2525589
Report Date: 05/15/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 141,8260D
 Analytical Date: 05/06/25 06:09
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 06 Batch: WG2063977-5					
Methylene chloride	ND		ug/l	2.0	--
1,1-Dichloroethane	ND		ug/l	1.0	--
Chloroform	ND		ug/l	1.0	--
Carbon tetrachloride	ND		ug/l	1.0	--
1,2-Dichloropropane	ND		ug/l	1.0	--
Dibromochloromethane	ND		ug/l	1.0	--
1,1,2-Trichloroethane	ND		ug/l	1.0	--
Tetrachloroethene	ND		ug/l	1.0	--
Chlorobenzene	ND		ug/l	1.0	--
Trichlorofluoromethane	ND		ug/l	2.0	--
1,2-Dichloroethane	ND		ug/l	1.0	--
1,1,1-Trichloroethane	ND		ug/l	1.0	--
Bromodichloromethane	ND		ug/l	1.0	--
trans-1,3-Dichloropropene	ND		ug/l	0.40	--
cis-1,3-Dichloropropene	ND		ug/l	0.40	--
1,3-Dichloropropene, Total	ND		ug/l	0.40	--
1,1-Dichloropropene	ND		ug/l	2.0	--
Bromoform	ND		ug/l	2.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--
Benzene	ND		ug/l	0.50	--
Toluene	ND		ug/l	1.0	--
Ethylbenzene	ND		ug/l	1.0	--
Chloromethane	ND		ug/l	2.0	--
Bromomethane	ND		ug/l	2.0	--
Vinyl chloride	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	2.0	--
1,1-Dichloroethene	ND		ug/l	1.0	--
trans-1,2-Dichloroethene	ND		ug/l	1.0	--
Trichloroethene	ND		ug/l	1.0	--



Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2525589
Report Date: 05/15/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 141,8260D
Analytical Date: 05/06/25 06:09
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 06 Batch: WG2063977-5					
1,2-Dichlorobenzene	ND		ug/l	1.0	--
1,3-Dichlorobenzene	ND		ug/l	1.0	--
1,4-Dichlorobenzene	ND		ug/l	1.0	--
Methyl tert butyl ether	ND		ug/l	2.0	--
p/m-Xylene	ND		ug/l	2.0	--
o-Xylene	ND		ug/l	1.0	--
Xylenes, Total	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	1.0	--
1,2-Dichloroethene, Total	ND		ug/l	1.0	--
Dibromomethane	ND		ug/l	2.0	--
1,2,3-Trichloropropane	ND		ug/l	2.0	--
Styrene	ND		ug/l	1.0	--
Dichlorodifluoromethane	ND		ug/l	2.0	--
Acetone	ND		ug/l	5.0	--
Carbon disulfide	ND		ug/l	2.0	--
Methyl ethyl ketone	ND		ug/l	5.0	--
Methyl isobutyl ketone	ND		ug/l	5.0	--
2-Hexanone	ND		ug/l	5.0	--
Bromochloromethane	ND		ug/l	2.0	--
Tetrahydrofuran	ND		ug/l	2.0	--
2,2-Dichloropropane	ND		ug/l	2.0	--
1,2-Dibromoethane	ND		ug/l	2.0	--
1,3-Dichloropropane	ND		ug/l	2.0	--
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--
Bromobenzene	ND		ug/l	2.0	--
n-Butylbenzene	ND		ug/l	2.0	--
sec-Butylbenzene	ND		ug/l	2.0	--
tert-Butylbenzene	ND		ug/l	2.0	--
o-Chlorotoluene	ND		ug/l	2.0	--



Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2525589
Report Date: 05/15/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 141,8260D
Analytical Date: 05/06/25 06:09
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 06 Batch: WG2063977-5					
p-Chlorotoluene	ND		ug/l	2.0	--
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--
Hexachlorobutadiene	ND		ug/l	0.60	--
Isopropylbenzene	ND		ug/l	2.0	--
p-Isopropyltoluene	ND		ug/l	2.0	--
Naphthalene	ND		ug/l	2.0	--
n-Propylbenzene	ND		ug/l	2.0	--
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--
Diethyl ether	ND		ug/l	2.0	--
Diisopropyl Ether	ND		ug/l	2.0	--
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--
1,4-Dioxane	ND		ug/l	250	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	86		70-130
Dibromofluoromethane	109		70-130



Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2525589
Report Date: 05/15/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 141,8260D
 Analytical Date: 05/08/25 05:25
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-02 Batch: WG2064038-5					
Methylene chloride	ND		ug/l	2.0	--
1,1-Dichloroethane	ND		ug/l	1.0	--
Chloroform	ND		ug/l	1.0	--
Carbon tetrachloride	ND		ug/l	1.0	--
1,2-Dichloropropane	ND		ug/l	1.0	--
Dibromochloromethane	ND		ug/l	1.0	--
1,1,2-Trichloroethane	ND		ug/l	1.0	--
Tetrachloroethene	ND		ug/l	1.0	--
Chlorobenzene	ND		ug/l	1.0	--
Trichlorofluoromethane	ND		ug/l	2.0	--
1,2-Dichloroethane	ND		ug/l	1.0	--
1,1,1-Trichloroethane	ND		ug/l	1.0	--
Bromodichloromethane	ND		ug/l	1.0	--
trans-1,3-Dichloropropene	ND		ug/l	0.40	--
cis-1,3-Dichloropropene	ND		ug/l	0.40	--
1,3-Dichloropropene, Total	ND		ug/l	0.40	--
1,1-Dichloropropene	ND		ug/l	2.0	--
Bromoform	ND		ug/l	2.0	--
1,1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--
Benzene	ND		ug/l	0.50	--
Toluene	ND		ug/l	1.0	--
Ethylbenzene	ND		ug/l	1.0	--
Chloromethane	ND		ug/l	2.0	--
Bromomethane	ND		ug/l	2.0	--
Vinyl chloride	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	2.0	--
1,1-Dichloroethene	ND		ug/l	1.0	--
trans-1,2-Dichloroethene	ND		ug/l	1.0	--
Trichloroethene	ND		ug/l	1.0	--



Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2525589
Report Date: 05/15/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 141,8260D
 Analytical Date: 05/08/25 05:25
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-02 Batch: WG2064038-5					
1,2-Dichlorobenzene	ND		ug/l	1.0	--
1,3-Dichlorobenzene	ND		ug/l	1.0	--
1,4-Dichlorobenzene	ND		ug/l	1.0	--
Methyl tert butyl ether	ND		ug/l	2.0	--
p/m-Xylene	ND		ug/l	2.0	--
o-Xylene	ND		ug/l	1.0	--
Xylenes, Total	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	1.0	--
1,2-Dichloroethene, Total	ND		ug/l	1.0	--
Dibromomethane	ND		ug/l	2.0	--
1,2,3-Trichloropropane	ND		ug/l	2.0	--
Styrene	ND		ug/l	1.0	--
Dichlorodifluoromethane	ND		ug/l	2.0	--
Acetone	ND		ug/l	5.0	--
Carbon disulfide	ND		ug/l	2.0	--
Methyl ethyl ketone	ND		ug/l	5.0	--
Methyl isobutyl ketone	ND		ug/l	5.0	--
2-Hexanone	ND		ug/l	5.0	--
Bromochloromethane	ND		ug/l	2.0	--
Tetrahydrofuran	ND		ug/l	2.0	--
2,2-Dichloropropane	ND		ug/l	2.0	--
1,2-Dibromoethane	ND		ug/l	2.0	--
1,3-Dichloropropane	ND		ug/l	2.0	--
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--
Bromobenzene	ND		ug/l	2.0	--
n-Butylbenzene	ND		ug/l	2.0	--
sec-Butylbenzene	ND		ug/l	2.0	--
tert-Butylbenzene	ND		ug/l	2.0	--
o-Chlorotoluene	ND		ug/l	2.0	--



Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2525589
Report Date: 05/15/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 141,8260D
Analytical Date: 05/08/25 05:25
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-02 Batch: WG2064038-5					
p-Chlorotoluene	ND		ug/l	2.0	--
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--
Hexachlorobutadiene	ND		ug/l	0.60	--
Isopropylbenzene	ND		ug/l	2.0	--
p-Isopropyltoluene	ND		ug/l	2.0	--
Naphthalene	ND		ug/l	2.0	--
n-Propylbenzene	ND		ug/l	2.0	--
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--
Diethyl ether	ND		ug/l	2.0	--
Diisopropyl Ether	ND		ug/l	2.0	--
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--
1,4-Dioxane	ND		ug/l	250	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	114		70-130



Lab Control Sample Analysis **Batch Quality Control**

Project Name: 50 TUFTS STREET

Project Number: 045163

Lab Number: L2525589

Report Date: 05/15/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 03-05 Batch: WG2062971-3 WG2062971-4								
Methylene chloride	100		110		70-130	10		20
1,1-Dichloroethane	81		86		70-130	6		20
Chloroform	95		100		70-130	5		20
Carbon tetrachloride	97		100		70-130	3		20
1,2-Dichloropropane	76		81		70-130	6		20
Dibromochloromethane	93		97		70-130	4		20
1,1,2-Trichloroethane	94		100		70-130	6		20
Tetrachloroethene	95		99		70-130	4		20
Chlorobenzene	90		94		70-130	4		20
Trichlorofluoromethane	110		120		70-130	9		20
1,2-Dichloroethane	91		96		70-130	5		20
1,1,1-Trichloroethane	100		110		70-130	10		20
Bromodichloromethane	95		100		70-130	5		20
trans-1,3-Dichloropropene	97		100		70-130	3		20
cis-1,3-Dichloropropene	90		96		70-130	6		20
1,1-Dichloropropene	92		95		70-130	3		20
Bromoform	87		91		70-130	4		20
1,1,2,2-Tetrachloroethane	78		83		70-130	6		20
Benzene	90		95		70-130	5		20
Toluene	93		97		70-130	4		20
Ethylbenzene	98		100		70-130	2		20
Chloromethane	60	Q	63	Q	70-130	5		20
Bromomethane	80		85		70-130	6		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 50 TUFTS STREET

Project Number: 045163

Lab Number: L2525589

Report Date: 05/15/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 03-05 Batch: WG2062971-3 WG2062971-4								
Vinyl chloride	84		87		70-130	4		20
Chloroethane	93		99		70-130	6		20
1,1-Dichloroethene	100		110		70-130	10		20
trans-1,2-Dichloroethene	98		100		70-130	2		20
Trichloroethene	92		97		70-130	5		20
1,2-Dichlorobenzene	83		90		70-130	8		20
1,3-Dichlorobenzene	86		90		70-130	5		20
1,4-Dichlorobenzene	83		86		70-130	4		20
Methyl tert butyl ether	100		110		70-130	10		20
p/m-Xylene	100		100		70-130	0		20
o-Xylene	95		100		70-130	5		20
cis-1,2-Dichloroethene	86		91		70-130	6		20
Dibromomethane	87		94		70-130	8		20
1,2,3-Trichloropropane	82		88		70-130	7		20
Styrene	100		105		70-130	5		20
Dichlorodifluoromethane	98		100		70-130	2		20
Acetone	88		100		70-130	13		20
Carbon disulfide	100		100		70-130	0		20
Methyl ethyl ketone	63	Q	68	Q	70-130	8		20
Methyl isobutyl ketone	71		77		70-130	8		20
2-Hexanone	63	Q	67	Q	70-130	6		20
Bromochloromethane	84		91		70-130	8		20
Tetrahydrofuran	67	Q	70		70-130	4		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 50 TUFTS STREET

Project Number: 045163

Lab Number: L2525589

Report Date: 05/15/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 03-05 Batch: WG2062971-3 WG2062971-4								
2,2-Dichloropropane	100		110		70-130	10		20
1,2-Dibromoethane	87		92		70-130	6		20
1,3-Dichloropropane	94		99		70-130	5		20
1,1,1,2-Tetrachloroethane	93		98		70-130	5		20
Bromobenzene	84		88		70-130	5		20
n-Butylbenzene	96		92		70-130	4		20
sec-Butylbenzene	91		88		70-130	3		20
tert-Butylbenzene	87		88		70-130	1		20
o-Chlorotoluene	91		92		70-130	1		20
p-Chlorotoluene	88		92		70-130	4		20
1,2-Dibromo-3-chloropropane	84		90		70-130	7		20
Hexachlorobutadiene	100		91		70-130	9		20
Isopropylbenzene	86		87		70-130	1		20
p-Isopropyltoluene	90		89		70-130	1		20
Naphthalene	75		80		70-130	6		20
n-Propylbenzene	90		90		70-130	0		20
1,2,3-Trichlorobenzene	87		93		70-130	7		20
1,2,4-Trichlorobenzene	84		89		70-130	6		20
1,3,5-Trimethylbenzene	91		92		70-130	1		20
1,2,4-Trimethylbenzene	92		96		70-130	4		20
Diethyl ether	100		110		70-130	10		20
Diisopropyl Ether	76		80		70-130	5		20
Ethyl-Tert-Butyl-Ether	82		89		70-130	8		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 50 TUFTS STREET

Lab Number: L2525589

Project Number: 045163

Report Date: 05/15/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 03-05 Batch: WG2062971-3 WG2062971-4								
Tertiary-Amyl Methyl Ether	89		97		70-130	9		20
1,4-Dioxane	124		118		70-130	5		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	98		100		70-130
Toluene-d8	93		93		70-130
4-Bromofluorobenzene	87		85		70-130
Dibromofluoromethane	87		89		70-130

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 50 TUFTS STREET

Project Number: 045163

Lab Number: L2525589

Report Date: 05/15/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 06 Batch: WG2063977-3 WG2063977-4								
Methylene chloride	100		97		70-130	3		20
1,1-Dichloroethane	100		100		70-130	0		20
Chloroform	100		96		70-130	4		20
Carbon tetrachloride	110		100		70-130	10		20
1,2-Dichloropropane	97		95		70-130	2		20
Dibromochloromethane	98		94		70-130	4		20
1,1,2-Trichloroethane	99		95		70-130	4		20
Tetrachloroethene	110		100		70-130	10		20
Chlorobenzene	100		97		70-130	3		20
Trichlorofluoromethane	110		100		70-130	10		20
1,2-Dichloroethane	95		92		70-130	3		20
1,1,1-Trichloroethane	100		99		70-130	1		20
Bromodichloromethane	97		93		70-130	4		20
trans-1,3-Dichloropropene	88		87		70-130	1		20
cis-1,3-Dichloropropene	90		88		70-130	2		20
1,1-Dichloropropene	98		96		70-130	2		20
Bromoform	91		91		70-130	0		20
1,1,2,2-Tetrachloroethane	91		90		70-130	1		20
Benzene	100		97		70-130	3		20
Toluene	96		94		70-130	2		20
Ethylbenzene	96		93		70-130	3		20
Chloromethane	79		76		70-130	4		20
Bromomethane	46	Q	49	Q	70-130	6		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 50 TUFTS STREET

Project Number: 045163

Lab Number: L2525589

Report Date: 05/15/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 06 Batch: WG2063977-3 WG2063977-4								
Vinyl chloride	98		96		70-130	2		20
Chloroethane	100		97		70-130	3		20
1,1-Dichloroethene	100		99		70-130	1		20
trans-1,2-Dichloroethene	100		100		70-130	0		20
Trichloroethene	100		98		70-130	2		20
1,2-Dichlorobenzene	100		99		70-130	1		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	100		98		70-130	2		20
Methyl tert butyl ether	92		90		70-130	2		20
p/m-Xylene	100		95		70-130	5		20
o-Xylene	95		95		70-130	0		20
cis-1,2-Dichloroethene	100		99		70-130	1		20
Dibromomethane	100		95		70-130	5		20
1,2,3-Trichloropropane	89		89		70-130	0		20
Styrene	95		95		70-130	0		20
Dichlorodifluoromethane	95		92		70-130	3		20
Acetone	98		94		70-130	4		20
Carbon disulfide	100		100		70-130	0		20
Methyl ethyl ketone	87		82		70-130	6		20
Methyl isobutyl ketone	75		76		70-130	1		20
2-Hexanone	73		77		70-130	5		20
Bromochloromethane	110		110		70-130	0		20
Tetrahydrofuran	99		98		70-130	1		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 50 TUFTS STREET

Project Number: 045163

Lab Number: L2525589

Report Date: 05/15/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 06 Batch: WG2063977-3 WG2063977-4								
2,2-Dichloropropane	98		95		70-130	3		20
1,2-Dibromoethane	96		96		70-130	0		20
1,3-Dichloropropane	94		95		70-130	1		20
1,1,1,2-Tetrachloroethane	100		98		70-130	2		20
Bromobenzene	96		96		70-130	0		20
n-Butylbenzene	100		98		70-130	2		20
sec-Butylbenzene	99		96		70-130	3		20
tert-Butylbenzene	94		93		70-130	1		20
o-Chlorotoluene	94		92		70-130	2		20
p-Chlorotoluene	93		90		70-130	3		20
1,2-Dibromo-3-chloropropane	85		87		70-130	2		20
Hexachlorobutadiene	99		96		70-130	3		20
Isopropylbenzene	92		91		70-130	1		20
p-Isopropyltoluene	96		96		70-130	0		20
Naphthalene	86		86		70-130	0		20
n-Propylbenzene	95		93		70-130	2		20
1,2,3-Trichlorobenzene	95		94		70-130	1		20
1,2,4-Trichlorobenzene	92		91		70-130	1		20
1,3,5-Trimethylbenzene	95		93		70-130	2		20
1,2,4-Trimethylbenzene	92		91		70-130	1		20
Diethyl ether	100		100		70-130	0		20
Diisopropyl Ether	95		93		70-130	2		20
Ethyl-Tert-Butyl-Ether	90		87		70-130	3		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 50 TUFTS STREET

Project Number: 045163

Lab Number: L2525589

Report Date: 05/15/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 06 Batch: WG2063977-3 WG2063977-4								
Tertiary-Amyl Methyl Ether	84		82		70-130	2		20
1,4-Dioxane	82		80		70-130	2		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	97		98		70-130
Toluene-d8	95		96		70-130
4-Bromofluorobenzene	84		86		70-130
Dibromofluoromethane	107		105		70-130

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 50 TUFTS STREET

Project Number: 045163

Lab Number: L2525589

Report Date: 05/15/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-02 Batch: WG2064038-3 WG2064038-4								
Methylene chloride	100		100		70-130	0		20
1,1-Dichloroethane	110		110		70-130	0		20
Chloroform	100		100		70-130	0		20
Carbon tetrachloride	100		100		70-130	0		20
1,2-Dichloropropane	110		100		70-130	10		20
Dibromochloromethane	92		94		70-130	2		20
1,1,2-Trichloroethane	93		97		70-130	4		20
Tetrachloroethene	90		90		70-130	0		20
Chlorobenzene	93		94		70-130	1		20
Trichlorofluoromethane	100		99		70-130	1		20
1,2-Dichloroethane	98		100		70-130	2		20
1,1,1-Trichloroethane	100		110		70-130	10		20
Bromodichloromethane	100		99		70-130	1		20
trans-1,3-Dichloropropene	89		90		70-130	1		20
cis-1,3-Dichloropropene	97		96		70-130	1		20
1,1-Dichloropropene	99		99		70-130	0		20
Bromoform	86		89		70-130	3		20
1,1,2,2-Tetrachloroethane	89		91		70-130	2		20
Benzene	100		100		70-130	0		20
Toluene	90		91		70-130	1		20
Ethylbenzene	88		90		70-130	2		20
Chloromethane	130		130		70-130	0		20
Bromomethane	71		74		70-130	4		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 50 TUFTS STREET

Project Number: 045163

Lab Number: L2525589

Report Date: 05/15/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-02 Batch: WG2064038-3 WG2064038-4								
Vinyl chloride	86		87		70-130	1		20
Chloroethane	88		83		70-130	6		20
1,1-Dichloroethene	100		100		70-130	0		20
trans-1,2-Dichloroethene	100		100		70-130	0		20
Trichloroethene	100		96		70-130	4		20
1,2-Dichlorobenzene	89		91		70-130	2		20
1,3-Dichlorobenzene	90		91		70-130	1		20
1,4-Dichlorobenzene	90		90		70-130	0		20
Methyl tert butyl ether	95		97		70-130	2		20
p/m-Xylene	90		90		70-130	0		20
o-Xylene	90		90		70-130	0		20
cis-1,2-Dichloroethene	99		100		70-130	1		20
Dibromomethane	100		97		70-130	3		20
1,2,3-Trichloropropane	86		88		70-130	2		20
Styrene	90		90		70-130	0		20
Dichlorodifluoromethane	120		110		70-130	9		20
Acetone	96		98		70-130	2		20
Carbon disulfide	110		110		70-130	0		20
Methyl ethyl ketone	94		110		70-130	16		20
Methyl isobutyl ketone	84		85		70-130	1		20
2-Hexanone	84		86		70-130	2		20
Bromochloromethane	110		110		70-130	0		20
Tetrahydrofuran	120		120		70-130	0		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 50 TUFTS STREET

Project Number: 045163

Lab Number: L2525589

Report Date: 05/15/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-02 Batch: WG2064038-3 WG2064038-4								
2,2-Dichloropropane	100		99		70-130	1		20
1,2-Dibromoethane	92		94		70-130	2		20
1,3-Dichloropropane	94		94		70-130	0		20
1,1,1,2-Tetrachloroethane	93		92		70-130	1		20
Bromobenzene	90		90		70-130	0		20
n-Butylbenzene	89		91		70-130	2		20
sec-Butylbenzene	88		92		70-130	4		20
tert-Butylbenzene	89		92		70-130	3		20
o-Chlorotoluene	88		90		70-130	2		20
p-Chlorotoluene	88		90		70-130	2		20
1,2-Dibromo-3-chloropropane	80		89		70-130	11		20
Hexachlorobutadiene	84		86		70-130	2		20
Isopropylbenzene	87		90		70-130	3		20
p-Isopropyltoluene	89		92		70-130	3		20
Naphthalene	89		91		70-130	2		20
n-Propylbenzene	87		90		70-130	3		20
1,2,3-Trichlorobenzene	86		88		70-130	2		20
1,2,4-Trichlorobenzene	83		86		70-130	4		20
1,3,5-Trimethylbenzene	88		92		70-130	4		20
1,2,4-Trimethylbenzene	89		91		70-130	2		20
Diethyl ether	110		110		70-130	0		20
Diisopropyl Ether	110		110		70-130	0		20
Ethyl-Tert-Butyl-Ether	95		96		70-130	1		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 50 TUFTS STREET

Project Number: 045163

Lab Number: L2525589

Report Date: 05/15/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-02 Batch: WG2064038-3 WG2064038-4								
Tertiary-Amyl Methyl Ether	88		88		70-130	0		20
1,4-Dioxane	78		80		70-130	3		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	105		100		70-130
Toluene-d8	98		99		70-130
4-Bromofluorobenzene	92		96		70-130
Dibromofluoromethane	107		105		70-130

Project Name: 50 TUFTS STREET**Lab Number:** L2525589**Project Number:** 045163**Report Date:** 05/15/25**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information**Cooler** **Custody Seal**

A Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2525589-01A	Vial HCl preserved	A	NA		5.1	Y	Absent		MCP-8260-21(14)
L2525589-01B	Vial HCl preserved	A	NA		5.1	Y	Absent		MCP-8260-21(14)
L2525589-01C	Vial HCl preserved	A	NA		5.1	Y	Absent		MCP-8260-21(14)
L2525589-02A	Vial HCl preserved	A	NA		5.1	Y	Absent		MCP-8260-21(14)
L2525589-02B	Vial HCl preserved	A	NA		5.1	Y	Absent		MCP-8260-21(14)
L2525589-02C	Vial HCl preserved	A	NA		5.1	Y	Absent		MCP-8260-21(14)
L2525589-03A	Vial HCl preserved	A	NA		5.1	Y	Absent		MCP-8260-21(14)
L2525589-03B	Vial HCl preserved	A	NA		5.1	Y	Absent		MCP-8260-21(14)
L2525589-03C	Vial HCl preserved	A	NA		5.1	Y	Absent		MCP-8260-21(14)
L2525589-04A	Vial HCl preserved	A	NA		5.1	Y	Absent		MCP-8260-21(14)
L2525589-04B	Vial HCl preserved	A	NA		5.1	Y	Absent		MCP-8260-21(14)
L2525589-04C	Vial HCl preserved	A	NA		5.1	Y	Absent		MCP-8260-21(14)
L2525589-05A	Vial HCl preserved	A	NA		5.1	Y	Absent		MCP-8260-21(14)
L2525589-05B	Vial HCl preserved	A	NA		5.1	Y	Absent		MCP-8260-21(14)
L2525589-05C	Vial HCl preserved	A	NA		5.1	Y	Absent		MCP-8260-21(14)
L2525589-06A	Vial HCl preserved	A	NA		5.1	Y	Absent		MCP-8260-21(14)
L2525589-06B	Vial HCl preserved	A	NA		5.1	Y	Absent		MCP-8260-21(14)
L2525589-06C	Vial HCl preserved	A	NA		5.1	Y	Absent		MCP-8260-21(14)

Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2525589
Report Date: 05/15/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report



Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2525589
Report Date: 05/15/25

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

Report Format: Data Usability Report



Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2525589
Report Date: 05/15/25

Data Qualifiers

- ND** - Not detected at the reporting limit (RL) for the sample.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: 50 TUFTS STREET**Lab Number:** L2525589**Project Number:** 045163**Report Date:** 05/15/25

REFERENCES

- 141 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA and IIB, November 2021.

LIMITATION OF LIABILITIES

Pace Analytical Services performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Pace Analytical Services shall be to re-perform the work at it's own expense. In no event shall Pace Analytical Services be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Pace Analytical Services.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Pace Analytical Services LLCFacility: **Northeast**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

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Published Date: 01/24/2025

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Certification Information**The following analytes are not included in our Primary NELAP Scope of Accreditation:****Westborough Facility – 8 Walkup Dr. Westborough, MA 01581****EPA 624.1:** m/p-xylene, o-xylene, Naphthalene**EPA 625.1:** alpha-Terpineol**EPA 8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****SM 2540D:** TSS.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

MADEP-APH.**Nonpotable Water:** EPA RSK-175 Dissolved Gases**Biological Tissue Matrix:** EPA 3050B**Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048****EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Nonpotable Water: EPA RSK-175 Dissolved Gases**The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:****Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)****The following analytes are included in our Massachusetts DEP Scope of Accreditation****Westborough Facility – 8 Walkup Dr. Westborough, MA 01581*****Drinking Water*****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.***Non-Potable Water*****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables).**Microbiology:** SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048*****Drinking Water*****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg. EPA 522, EPA 537.1.*****Non-Potable Water*****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1 Hg.****SM2340B**

Pace Analytical Services LLCID No.: **17873**Facility: **Northeast**

Revision 27

Department: **Quality Assurance**

Published Date: 01/24/2025

Title: **Certificate/Approval Program Summary**

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Certification IDs:**Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**

CT PH-0826, IL 200077, IN C-MA-03, KY JY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 3090, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048

ANAB/DoD L2474, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

For a complete listing of analytes and methods, please contact your Project Manager.

Method Blank Summary

Form 4

Volatiles

Client	: GEI Consultants	Lab Number	: L2525589
Project Name	: 50 TUFTS STREET	Project Number	: 045163
Lab Sample ID	: WG2063977-5	Lab File ID	: V33250506A07
Instrument ID	: VOA133		
Matrix	: WATER	Analysis Date	: 05/06/25 06:09

Client Sample No.	Lab Sample ID	Analysis Date
WG2063977-3LCS	WG2063977-3	05/06/25 04:23
WG2063977-4LCSD	WG2063977-4	05/06/25 04:50
045163-MW122	L2525589-06D	05/06/25 13:39

Method Blank Summary Form 4 Volatiles

Client	: GEI Consultants	Lab Number	: L2525589
Project Name	: 50 TUFTS STREET	Project Number	: 045163
Lab Sample ID	: WG2062971-5	Lab File ID	: VQ250506A05
Instrument ID	: QUIMBY		
Matrix	: WATER	Analysis Date	: 05/06/25 06:53

Client Sample No.	Lab Sample ID	Analysis Date
WG2062971-3LCS	WG2062971-3	05/06/25 05:44
WG2062971-4LCSD	WG2062971-4	05/06/25 06:07
045163-MW111R	L2525589-05	05/06/25 09:11
045163-MW203R	L2525589-03D	05/06/25 09:34
045163-SHMW-2R	L2525589-04D	05/06/25 09:57

Method Blank Summary Form 4 Volatiles

Client	: GEI Consultants	Lab Number	: L2525589
Project Name	: 50 TUFTS STREET	Project Number	: 045163
Lab Sample ID	: WG2064038-5	Lab File ID	: J250508B05
Instrument ID	: JACK		
Matrix	: WATER	Analysis Date	: 05/08/25 05:25

Client Sample No.	Lab Sample ID	Analysis Date
WG2064038-3LCS	WG2064038-3	05/08/25 03:38
WG2064038-4LCSD	WG2064038-4	05/08/25 04:05
045163-MW900	L2525589-02	05/08/25 08:34
045163-MW116	L2525589-01	05/08/25 09:01

Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : 50 TUFTS STREET
 Instrument ID : VOA133
 Lab File ID : V33250506A03
 Sample No : WG2063977-2
 Channel :

Lab Number : L2525589
 Project Number : 045163
 Calibration Date : 05/06/25 04:23
 Init. Calib. Date(s) : 03/12/25 03/12/25
 Init. Calib. Times : 07:01 10:06

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	148	0
Dichlorodifluoromethane	0.325	0.31	-	4.6	20	140	0
Chloromethane	0.36	0.284	-	21.1*	20	114	0
Vinyl chloride	0.314	0.308	-	1.9	20	143	0
Bromomethane	0.145	0.067	-	53.8*	20	74	0
Chloroethane	0.166	0.165	-	0.6	20	145	0
Trichlorofluoromethane	0.366	0.392	-	-7.1	20	152	0
Ethyl ether	0.127	0.131	-	-3.1	20	152	0
1,1-Dichloroethene	0.225	0.229	-	-1.8	20	146	0
Carbon disulfide	0.684	0.721	-	-5.4	20	148	0
Freon-113	0.226	0.254	-	-12.4	20	155	0
Methylene chloride	0.254	0.261	-	-2.8	20	150	0
Acetone	0.075	0.074	-	1.3	20	137	0
trans-1,2-Dichloroethene	0.244	0.249	-	-2	20	144	0
Methyl acetate	0.177	0.194	-	-9.6	20	155	0
Methyl tert-butyl ether	0.676	0.623	-	7.8	20	130	0
tert-Butyl alcohol	0.03	0.024	-	20	20	113	0
Diisopropyl ether	0.896	0.849	-	5.2	20	133	0
1,1-Dichloroethane	0.485	0.506	-	-4.3	20	144	0
Halothane	0.194	0.214	-	-10.3	20	154	0
Acrylonitrile	0.095	0.097	-	-2.1	20	146	0
Ethyl tert-butyl ether	0.834	0.748	-	10.3	20	125	0
Vinyl acetate	0.588	0.56	-	4.8	20	130	0
cis-1,2-Dichloroethene	0.273	0.279	-	-2.2	20	144	0
2,2-Dichloropropane	0.375	0.369	-	1.6	20	142	0
Bromochloromethane	0.126	0.142	-	-12.7	20	155	0
Cyclohexane	0.498	0.512	-	-2.8	20	143	0
Chloroform	0.443	0.451	-	-1.8	20	142	0
Ethyl acetate	0.271	0.26	-	4.1	20	136	0
Carbon tetrachloride	0.36	0.388	-	-7.8	20	153	0
Tetrahydrofuran	0.096	0.095	-	1	20	139	0
Dibromofluoromethane	0.267	0.285	-	-6.7	20	157	0
1,1,1-Trichloroethane	0.388	0.4	-	-3.1	20	146	0
2-Butanone	0.127	0.111	-	12.6	20	123	0
1,1-Dichloropropene	0.321	0.315	-	1.9	20	139	0
Benzene	0.998	1.001	-	-0.3	20	142	0
tert-Amyl methyl ether	0.683	0.576	-	15.7	20	120	0
1,2-Dichloroethane-d4	0.319	0.311	-	2.5	20	145	0
1,2-Dichloroethane	0.348	0.332	-	4.6	20	136	0
Methyl cyclohexane	0.427	0.435	-	-1.9	20	140	0
Trichloroethene	0.269	0.273	-	-1.5	20	146	0
Dibromomethane	0.121	0.12	-	0.8	20	140	0
1,2-Dichloropropane	0.217	0.211	-	2.8	20	136	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : 50 TUFTS STREET
 Instrument ID : VOA133
 Lab File ID : V33250506A03
 Sample No : WG2063977-2
 Channel :

Lab Number : L2525589
 Project Number : 045163
 Calibration Date : 05/06/25 04:23
 Init. Calib. Date(s) : 03/12/25 03/12/25
 Init. Calib. Times : 07:01 10:06

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Bromodichloromethane	0.266	0.257*	-	3.4	20	133	0
1,4-Dioxane	0.00173	0.00142*	-	17.9	20	115	0
cis-1,3-Dichloropropene	0.327	0.295*	-	9.8	20	125	0
Chlorobenzene-d5	1	1	-	0	20	153	0
Toluene-d8	1.307	1.244	-	4.8	20	145	0
Toluene	0.81	0.776	-	4.2	20	137	0
4-Methyl-2-pentanone	0.13	0.097	-	25.4*	20	104	0
Tetrachloroethene	0.359	0.384	-	-7	20	151	0
trans-1,3-Dichloropropene	0.48	0.424	-	11.7	20	121	0
Ethyl methacrylate	0.368	0.296	-	19.6	20	109	0
1,1,2-Trichloroethane	0.241	0.238	-	1.2	20	134	0
Chlorodibromomethane	0.356	0.348	-	2.2	20	133	0
1,3-Dichloropropane	0.516	0.485	-	6	20	128	0
1,2-Dibromoethane	0.298	0.286	-	4	20	134	0
2-Hexanone	0.221	0.161	-	27.1*	20	99	0
Chlorobenzene	0.927	0.925	-	0.2	20	139	0
Ethylbenzene	1.547	1.482	-	4.2	20	133	0
1,1,1,2-Tetrachloroethane	0.341	0.348	-	-2.1	20	138	0
p/m Xylene	0.608	0.606	-	0.3	20	135	0
o Xylene	0.602	0.576	-	4.3	20	129	0
Styrene	0.985	0.956	-	2.9	20	130	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	160	0
Bromoform	0.431	0.394	-	8.6	20	133	0
Isopropylbenzene	2.813	2.597	-	7.7	20	132	0
4-Bromofluorobenzene	0.926	0.776	-	16.2	20	136	0
Bromobenzene	0.701	0.672	-	4.1	20	142	0
n-Propylbenzene	3.323	3.158	-	5	20	135	0
1,4-Dichlorobutane	0.999	0.925	-	7.4	20	133	0
1,1,2,2-Tetrachloroethane	0.741	0.677	-	8.6	20	130	0
4-Ethyltoluene	2.779	2.66	-	4.3	20	134	0
2-Chlorotoluene	2.289	2.152	-	6	20	133	0
1,3,5-Trimethylbenzene	2.407	2.287	-	5	20	133	0
1,2,3-Trichloropropane	0.581	0.516	-	11.2	20	126	0
trans-1,4-Dichloro-2-buten	0.247	0.179	-	27.5*	20	103	0
4-Chlorotoluene	2.105	1.952	-	7.3	20	133	0
tert-Butylbenzene	2.085	1.964	-	5.8	20	134	0
1,2,4-Trimethylbenzene	2.39	2.213	-	7.4	20	130	0
sec-Butylbenzene	2.992	2.952	-	1.3	20	139	0
p-Isopropyltoluene	2.645	2.542	-	3.9	20	134	0
1,3-Dichlorobenzene	1.375	1.432	-	-4.1	20	149	0
1,4-Dichlorobenzene	1.387	1.401	-	-1	20	145	0
p-Diethylbenzene	1.592	1.49	-	6.4	20	131	0
n-Butylbenzene	2.243	2.242	-	0	20	139	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : 50 TUFTS STREET
 Instrument ID : VOA133
 Lab File ID : V33250506A03
 Sample No : WG2063977-2
 Channel :

Lab Number : L2525589
 Project Number : 045163
 Calibration Date : 05/06/25 04:23
 Init. Calib. Date(s) : 03/12/25 03/12/25
 Init. Calib. Times : 07:01 10:06

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,2-Dichlorobenzene	1.297	1.301	-	-0.3	20	144	0
1,2,4,5-Tetramethylbenzene	2.449	2.009	-	18	20	117	.01
1,2-Dibromo-3-chloropropan	0.138	0.117	-	15.2	20	125	0
1,3,5-Trichlorobenzene	0.971	0.967	-	0.4	20	139	0
Hexachlorobutadiene	0.348	0.344	-	1.1	20	149	.01
1,2,4-Trichlorobenzene	0.869	0.803	-	7.6	20	132	.01
Naphthalene	2.372	2.03	-	14.4	20	122	0
1,2,3-Trichlorobenzene	0.801	0.763	-	4.7	20	137	.01

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : 50 TUFTS STREET
 Instrument ID : QUIMBY
 Lab File ID : VQ250506A02
 Sample No : WG2062971-2
 Channel :

Lab Number : L2525589
 Project Number : 045163
 Calibration Date : 05/06/25 05:44
 Init. Calib. Date(s) : 04/02/25 04/02/25
 Init. Calib. Times : 04:37 09:38

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	143	0
Dichlorodifluoromethane	0.287	0.281	-	2.1	20	136	0
Chloromethane	0.372	0.223	-	40.1*	20	82	0
Vinyl chloride	0.253	0.213	-	15.8	20	117	0
Bromomethane	0.117	0.095	-	18.8	20	122	0
Chloroethane	0.141	0.13	-	7.8	20	131	0
Trichlorofluoromethane	0.323	0.368	-	-13.9	20	156	0
Ethyl ether	0.1	0.1	-	0	20	138	0
1,1-Dichloroethene	0.157	0.165	-	-5.1	20	146	0
Carbon disulfide	0.432	0.44	-	-1.9	20	147	0
Methylene chloride	0.177	0.182	-	-2.8	20	142	0
Acetone	10	8.825	-	11.8	20	123	0
trans-1,2-Dichloroethene	0.171	0.168	-	1.8	20	142	0
Methyl tert-butyl ether	0.511	0.541	-	-5.9	20	148	0
Diisopropyl ether	0.79	0.604	-	23.5*	20	104	0
1,1-Dichloroethane	0.468	0.379	-	19	20	108	0
Ethyl tert-butyl ether	0.738	0.603	-	18.3	20	119	0
cis-1,2-Dichloroethene	0.233	0.2*	-	14.2	20	124	0
2,2-Dichloropropane	0.343	0.361	-	-5.2	20	151	0
Bromochloromethane	0.11	0.093*	-	15.5	20	112	0
Chloroform	0.402	0.382	-	5	20	130	0
Carbon tetrachloride	0.32	0.309	-	3.4	20	133	0
Tetrahydrofuran	0.065	0.044	-	32.3*	20	97	0
Dibromofluoromethane	0.311	0.271	-	12.9	20	123	0
1,1,1-Trichloroethane	0.348	0.359	-	-3.2	20	141	0
2-Butanone	0.081	0.051	-	37*	20	104	0
1,1-Dichloropropene	0.279	0.256	-	8.2	20	136	0
Benzene	0.88	0.787	-	10.6	20	122	0
tert-Amyl methyl ether	0.509	0.455	-	10.6	20	133	0
1,2-Dichloroethane-d4	0.38	0.374	-	1.6	20	138	0
1,2-Dichloroethane	0.326	0.297	-	8.9	20	125	0
Trichloroethene	0.225	0.207	-	8	20	125	0
Dibromomethane	0.119	0.104	-	12.6	20	118	0
1,2-Dichloropropane	0.252	0.193*	-	23.4*	20	105	0
Bromodichloromethane	0.297	0.282*	-	5.1	20	132	0
1,4-Dioxane	0.00073	0.00091*	-	-24.7*	20	214	0
cis-1,3-Dichloropropene	0.328	0.295*	-	10.1	20	123	0
Chlorobenzene-d5	1	1	-	0	20	135	0
Toluene-d8	1.521	1.411	-	7.2	20	123	0
Toluene	0.731	0.681	-	6.8	20	119	0
4-Methyl-2-pentanone	0.076	0.054	-	28.9*	20	108	0
Tetrachloroethene	0.322	0.307	-	4.7	20	127	0
trans-1,3-Dichloropropene	0.384	0.372	-	3.1	20	126	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : 50 TUFTS STREET
 Instrument ID : QUIMBY
 Lab File ID : VQ250506A02
 Sample No : WG2062971-2
 Channel :

Lab Number : L2525589
 Project Number : 045163
 Calibration Date : 05/06/25 05:44
 Init. Calib. Date(s) : 04/02/25 04/02/25
 Init. Calib. Times : 04:37 09:38

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,1,2-Trichloroethane	0.195	0.183*	-	6.2	20	119	0
Chlorodibromomethane	0.278	0.259	-	6.8	20	121	0
1,3-Dichloropropane	0.411	0.386	-	6.1	20	120	0
1,2-Dibromoethane	0.223	0.195*	-	12.6	20	116	0
2-Hexanone	0.13	0.082	-	36.9*	20	94	0
Chlorobenzene	0.799	0.722	-	9.6	20	117	0
Ethylbenzene	1.337	1.307	-	2.2	20	124	0
1,1,1,2-Tetrachloroethane	0.3	0.279	-	7	20	119	0
p/m Xylene	0.512	0.5	-	2.3	20	118	0
o Xylene	0.488	0.472	-	3.3	20	117	0
Styrene	0.818	0.811	-	0.9	20	115	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	146	0
Bromoform	0.289	0.251	-	13.1	20	130	0
Isopropylbenzene	2.184	1.891	-	13.4	20	125	0
4-Bromofluorobenzene	0.959	0.833	-	13.1	20	133	0
Bromobenzene	0.596	0.503	-	15.6	20	123	0
n-Propylbenzene	2.656	2.388	-	10.1	20	128	0
1,1,2,2-Tetrachloroethane	0.473	0.371	-	21.6*	20	116	0
2-Chlorotoluene	1.965	1.789	-	9	20	128	0
1,3,5-Trimethylbenzene	1.935	1.767	-	8.7	20	127	0
1,2,3-Trichloropropane	0.394	0.323	-	18	20	118	0
4-Chlorotoluene	1.761	1.557	-	11.6	20	125	0
tert-Butylbenzene	1.595	1.383	-	13.3	20	125	0
1,2,4-Trimethylbenzene	1.867	1.726	-	7.6	20	125	0
sec-Butylbenzene	2.303	2.098	-	8.9	20	128	0
p-Isopropyltoluene	1.962	1.767	-	9.9	20	128	0
1,3-Dichlorobenzene	1.171	1.009	-	13.8	20	120	0
1,4-Dichlorobenzene	1.209	1.004	-	17	20	121	0
n-Butylbenzene	1.717	1.655	-	3.6	20	137	0
1,2-Dichlorobenzene	1.102	0.912	-	17.2	20	116	0
1,2-Dibromo-3-chloropropan	0.068	0.056	-	17.6	20	127	0
Hexachlorobutadiene	0.314	0.326	-	-3.8	20	173	0
1,2,4-Trichlorobenzene	0.76	0.635	-	16.4	20	128	0
Naphthalene	1.459	1.095	-	24.9*	20	113	0
1,2,3-Trichlorobenzene	0.709	0.62	-	12.6	20	126	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : 50 TUFTS STREET
 Instrument ID : JACK
 Lab File ID : J250508B01
 Sample No : WG2064038-2
 Channel :

Lab Number : L2525589
 Project Number : 045163
 Calibration Date : 05/08/25 03:38
 Init. Calib. Date(s) : 02/28/25 02/28/25
 Init. Calib. Times : 05:35 08:42

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	100	0
Dichlorodifluoromethane	0.28	0.322	-	-15	20	113	0
Chloromethane	0.294	0.383	-	-30.3*	20	130	0
Vinyl chloride	0.352	0.305	-	13.4	20	84	0
Bromomethane	0.178	0.126	-	29.2*	20	73	0
Chloroethane	0.189	0.167	-	11.6	20	86	0
Trichlorofluoromethane	0.411	0.411	-	0	20	97	0
Ethyl ether	0.116	0.133	-	-14.7	20	113	0
1,1-Dichloroethene	0.228	0.233	-	-2.2	20	103	0
Carbon disulfide	0.7	0.754	-	-7.7	20	108	0
Freon-113	0.246	0.258	-	-4.9	20	105	0
Acrolein	0.041	0.043	-	-4.9	20	112	0
Methylene chloride	0.247	0.261	-	-5.7	20	107	0
Acetone	0.077	0.074	-	3.9	20	101	0
trans-1,2-Dichloroethene	0.247	0.248	-	-0.4	20	99	0
Methyl acetate	0.167	0.198	-	-18.6	20	123	0
Methyl tert-butyl ether	0.682	0.648	-	5	20	96	0
tert-Butyl alcohol	0.026	0.023	-	11.5	20	80	0
Diisopropyl ether	0.875	0.948	-	-8.3	20	109	0
1,1-Dichloroethane	0.492	0.531	-	-7.9	20	108	0
Halothane	0.201	0.199	-	1	20	97	0
Acrylonitrile	0.082	0.096	-	-17.1	20	116	0
Ethyl tert-butyl ether	0.785	0.745	-	5.1	20	96	0
Vinyl acetate	0.688	0.652	-	5.2	20	97	0
cis-1,2-Dichloroethene	0.272	0.268	-	1.5	20	99	0
2,2-Dichloropropane	0.423	0.424	-	-0.2	20	102	0
Bromochloromethane	0.122	0.135	-	-10.7	20	106	0
Cyclohexane	0.51	0.518	-	-1.6	20	103	0
Chloroform	0.462	0.472	-	-2.2	20	105	0
Ethyl acetate	0.269	0.286	-	-6.3	20	107	0
Carbon tetrachloride	0.363	0.381	-	-5	20	102	0
Tetrahydrofuran	0.095	0.115	-	-21.1*	20	118	0
Dibromofluoromethane	0.264	0.283	-	-7.2	20	107	0
1,1,1-Trichloroethane	0.408	0.416	-	-2	20	102	0
2-Butanone	0.121	0.113	-	6.6	20	96	0
1,1-Dichloropropene	0.335	0.33	-	1.5	20	97	0
Benzene	1.011	1.017	-	-0.6	20	102	0
tert-Amyl methyl ether	0.688	0.605	-	12.1	20	88	0
1,2-Dichloroethane-d4	0.324	0.34	-	-4.9	20	107	0
1,2-Dichloroethane	0.355	0.35	-	1.4	20	98	0
Methyl cyclohexane	0.47	0.445	-	5.3	20	98	0
Trichloroethene	0.271	0.271	-	0	20	99	0
Dibromomethane	0.153	0.156	-	-2	20	99	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : 50 TUFTS STREET
 Instrument ID : JACK
 Lab File ID : J250508B01
 Sample No : WG2064038-2
 Channel :

Lab Number : L2525589
 Project Number : 045163
 Calibration Date : 05/08/25 03:38
 Init. Calib. Date(s) : 02/28/25 02/28/25
 Init. Calib. Times : 05:35 08:42

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,2-Dichloropropane	0.262	0.278	-	-6.1	20	100	0
2-Chloroethyl vinyl ether	0.159	0.122	-	23.3*	20	72	0
Bromodichloromethane	0.344	0.348	-	-1.2	20	97	0
1,4-Dioxane	0.00217	0.00168*	-	22.6*	20	79	-.02
cis-1,3-Dichloropropene	0.409	0.395	-	3.4	20	92	0
Chlorobenzene-d5	1	1	-	0	20	105	0
Toluene-d8	1.318	1.295	-	1.7	20	104	0
Toluene	0.882	0.794	-	10	20	95	0
4-Methyl-2-pentanone	0.125	0.105	-	16	20	85	0
Tetrachloroethene	0.411	0.369	-	10.2	20	94	0
trans-1,3-Dichloropropene	0.495	0.441	-	10.9	20	90	0
Ethyl methacrylate	0.424	0.348	-	17.9	20	82	0
1,1,2-Trichloroethane	0.262	0.244	-	6.9	20	91	0
Chlorodibromomethane	0.365	0.336	-	7.9	20	93	0
1,3-Dichloropropane	0.486	0.459	-	5.6	20	96	0
1,2-Dibromoethane	0.295	0.273	-	7.5	20	92	0
2-Hexanone	0.255	0.216	-	15.3	20	83	0
Chlorobenzene	0.973	0.902	-	7.3	20	93	0
Ethylbenzene	1.752	1.549	-	11.6	20	92	0
1,1,1,2-Tetrachloroethane	0.357	0.332	-	7	20	94	0
p/m Xylene	0.685	0.618	-	9.8	20	95	0
o Xylene	0.658	0.6	-	8.8	20	95	0
Styrene	1.121	0.99	-	11.7	20	91	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	109	0
Bromoform	0.441	0.377	-	14.5	20	86	0
Isopropylbenzene	3.009	2.619	-	13	20	93	0
4-Bromofluorobenzene	0.855	0.784	-	8.3	20	101	0
Bromobenzene	0.72	0.645	-	10.4	20	92	0
n-Propylbenzene	3.645	3.157	-	13.4	20	92	0
1,4-Dichlorobutane	0.953	0.918	-	3.7	20	102	0
1,1,2,2-Tetrachloroethane	0.7	0.624	-	10.9	20	89	0
4-Ethyltoluene	2.97	2.647	-	10.9	20	95	0
2-Chlorotoluene	2.404	2.121	-	11.8	20	94	0
1,3,5-Trimethylbenzene	2.587	2.284	-	11.7	20	95	0
1,2,3-Trichloropropane	0.56	0.482	-	13.9	20	88	0
trans-1,4-Dichloro-2-buten	0.238	0.211	-	11.3	20	89	0
4-Chlorotoluene	2.179	1.912	-	12.3	20	92	0
tert-Butylbenzene	2.151	1.907	-	11.3	20	95	0
1,2,4-Trimethylbenzene	2.516	2.23	-	11.4	20	94	0
sec-Butylbenzene	3.283	2.89	-	12	20	95	0
p-Isopropyltoluene	2.792	2.491	-	10.8	20	95	0
1,3-Dichlorobenzene	1.47	1.321	-	10.1	20	94	0
1,4-Dichlorobenzene	1.47	1.317	-	10.4	20	94	0

* Value outside of QC limits.

Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : 50 TUFTS STREET
 Instrument ID : JACK
 Lab File ID : J250508B01
 Sample No : WG2064038-2
 Channel :

Lab Number : L2525589
 Project Number : 045163
 Calibration Date : 05/08/25 03:38
 Init. Calib. Date(s) : 02/28/25 02/28/25
 Init. Calib. Times : 05:35 08:42

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
p-Diethylbenzene	1.637	1.5	-	8.4	20	98	0
n-Butylbenzene	2.502	2.23	-	10.9	20	97	0
1,2-Dichlorobenzene	1.362	1.21	-	11.2	20	93	0
1,2,4,5-Tetramethylbenzene	2.513	2.105	-	16.2	20	91	0
1,2-Dibromo-3-chloropropan	0.133	0.107	-	19.5	20	83	0
1,3,5-Trichlorobenzene	1.072	0.926	-	13.6	20	93	0
Hexachlorobutadiene	0.458	0.383	-	16.4	20	94	0
1,2,4-Trichlorobenzene	0.948	0.791	-	16.6	20	90	0
Naphthalene	2.388	2.12	-	11.2	20	94	0
1,2,3-Trichlorobenzene	0.868	0.744	-	14.3	20	91	0

* Value outside of QC limits.





ANALYTICAL REPORT

Lab Number:	L2525591
Client:	GEI Consultants 400 Unicorn Park Drive Woburn, MA 01801
ATTN:	Chris Coner
Phone:	(781) 721-4000
Project Name:	50 TUFTS STREET
Project Number:	045163
Report Date:	05/15/25

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Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2525591
Report Date: 05/15/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2525591-01	045163-MW112A	WATER	SOMERVILLE, MASSACHUSETTS	04/25/25 10:45	04/25/25

Project Name: 50 TUFTS STREET

Lab Number: L2525591

Project Number: 045163

Report Date: 05/15/25

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES
A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	NO
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	NO
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	NO
For any questions answered "No", please refer to the case narrative section on the following page(s).		

Please note that sample matrix information is located in the Sample Results section of this report.



Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2525591
Report Date: 05/15/25

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Pace Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Pace's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Pace Project Manager and made arrangements for Pace to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2525591
Report Date: 05/15/25

Case Narrative (continued)

Report Submission

The analysis of Sulfide was subcontracted. A copy of the laboratory report is included as an addendum. Please note: This data is only available in PDF format and is not available on Data Merger.

MCP Related Narratives

Volatile Organics

In reference to question G:

L2525591-01D: One or more of the target analytes did not achieve the requested CAM reporting limits.

In reference to question H:

L2525591-01D: Initial Calibration did not meet:

Lowest Calibration Standard Minimum Response Factor: 1,4-dioxane (0.0019)

Average Response Factor: 1,4-dioxane

Verification: dichlorodifluoromethane (136%)

L2525591-01D: The associated continuing calibration standard is outside the acceptance criteria for several compounds; however, it is within overall method allowances. Associated results are considered to be biased high if the %D is negative and biased low if the %D is positive. A copy of the continuing calibration standard is included as an addendum to this report.

Total Metals

In reference to question I:

All samples were analyzed for a subset of MCP analytes per client request.

Non-MCP Related Narratives

Nitrogen, Total Kjeldahl

The WG2065597-3 Laboratory Duplicate RPD performed on L2525591-01 is above the acceptance criteria for nitrogen, total kjeldahl (32%); however, the sample and duplicate results are less than five times the reporting limit and the RPD is valid.

Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2525591
Report Date: 05/15/25

Case Narrative (continued)

Total Organic Carbon

WG2060942: A second Matrix Spike and Laboratory Duplicate were prepared with the sample batch, however, the native sample was not available for reporting and the QC results could not be reported.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

Melissa Sturgis Melissa Sturgis

Title: Technical Director/Representative

Date: 05/15/25

QC OUTLIER SUMMARY REPORT

Project Name: 50 TUFTS STREET**Lab Number:** L2525591**Project Number:** 045163**Report Date:** 05/15/25

Method	Client ID (Native ID)	Lab ID	Parameter	QC Type	Recovery/RPD (%)	QC Limits (%)	Associated Samples	Data Quality Assessment
MCP Volatile Organics - Westborough Lab								
8260D	Batch QC	WG2063955-3	1,4-Dioxane	LCS	64	70-130	01	potential low bias
General Chemistry - Westborough Lab								
4500NH3-H	Batch QC (L2525591-01)	WG2065597-3	Nitrogen, Total Kjeldahl	Duplicate	32	24	01	non-directional bias

ORGANICS

VOLATILES

Project Name: 50 TUFTS STREET**Project Number:** 045163**Lab Number:** L2525591**Report Date:** 05/15/25**SAMPLE RESULTS**

Lab ID: L2525591-01

Client ID: 045163-MW112A

Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/25/25 10:45

Date Received: 04/25/25

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Analytical Method: 117,-

Analytical Date: 05/06/25 15:35

Analyst: BJB

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Air Lab							
Methane	5.31		ug/l	5.00	--	1	A
Ethene	ND		ug/l	3.00	--	1	A
Ethane	ND		ug/l	3.00	--	1	A

Project Name: 50 TUFTS STREET**Lab Number:** L2525591**Project Number:** 045163**Report Date:** 05/15/25**SAMPLE RESULTS**

Lab ID: L2525591-01 D
 Client ID: 045163-MW112A
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/25/25 10:45
 Date Received: 04/25/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water

Analytical Method: 141,8260D

Analytical Date: 05/06/25 14:06

Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	4.0	--	2
1,1-Dichloroethane	19		ug/l	2.0	--	2
Chloroform	ND		ug/l	2.0	--	2
Carbon tetrachloride	ND		ug/l	2.0	--	2
1,2-Dichloropropane	ND		ug/l	2.0	--	2
Dibromochloromethane	ND		ug/l	2.0	--	2
1,1,2-Trichloroethane	ND		ug/l	2.0	--	2
Tetrachloroethene	220		ug/l	2.0	--	2
Chlorobenzene	ND		ug/l	2.0	--	2
Trichlorofluoromethane	ND		ug/l	4.0	--	2
1,2-Dichloroethane	ND		ug/l	2.0	--	2
1,1,1-Trichloroethane	2.3		ug/l	2.0	--	2
Bromodichloromethane	ND		ug/l	2.0	--	2
trans-1,3-Dichloropropene	ND		ug/l	0.80	--	2
cis-1,3-Dichloropropene	ND		ug/l	0.80	--	2
1,3-Dichloropropene, Total	ND		ug/l	0.80	--	2
1,1-Dichloropropene	ND		ug/l	4.0	--	2
Bromoform	ND		ug/l	4.0	--	2
1,1,2,2-Tetrachloroethane	ND		ug/l	2.0	--	2
Benzene	ND		ug/l	1.0	--	2
Toluene	ND		ug/l	2.0	--	2
Ethylbenzene	ND		ug/l	2.0	--	2
Chloromethane	ND		ug/l	4.0	--	2
Bromomethane	ND		ug/l	4.0	--	2
Vinyl chloride	10		ug/l	2.0	--	2
Chloroethane	ND		ug/l	4.0	--	2
1,1-Dichloroethene	33		ug/l	2.0	--	2
trans-1,2-Dichloroethene	ND		ug/l	2.0	--	2



Project Name: 50 TUFTS STREET**Lab Number:** L2525591**Project Number:** 045163**Report Date:** 05/15/25**SAMPLE RESULTS**

Lab ID: L2525591-01 D
 Client ID: 045163-MW112A
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/25/25 10:45
 Date Received: 04/25/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	56		ug/l	2.0	--	2
1,2-Dichlorobenzene	ND		ug/l	2.0	--	2
1,3-Dichlorobenzene	ND		ug/l	2.0	--	2
1,4-Dichlorobenzene	ND		ug/l	2.0	--	2
Methyl tert butyl ether	ND		ug/l	4.0	--	2
p/m-Xylene	ND		ug/l	4.0	--	2
o-Xylene	ND		ug/l	2.0	--	2
Xylenes, Total	ND		ug/l	2.0	--	2
cis-1,2-Dichloroethene	99		ug/l	2.0	--	2
1,2-Dichloroethene, Total	99		ug/l	2.0	--	2
Dibromomethane	ND		ug/l	4.0	--	2
1,2,3-Trichloropropane	ND		ug/l	4.0	--	2
Styrene	ND		ug/l	2.0	--	2
Dichlorodifluoromethane	ND		ug/l	4.0	--	2
Acetone	ND		ug/l	10	--	2
Carbon disulfide	ND		ug/l	4.0	--	2
Methyl ethyl ketone	ND		ug/l	10	--	2
Methyl isobutyl ketone	ND		ug/l	10	--	2
2-Hexanone	ND		ug/l	10	--	2
Bromochloromethane	ND		ug/l	4.0	--	2
Tetrahydrofuran	ND		ug/l	4.0	--	2
2,2-Dichloropropane	ND		ug/l	4.0	--	2
1,2-Dibromoethane	ND		ug/l	4.0	--	2
1,3-Dichloropropane	ND		ug/l	4.0	--	2
1,1,1,2-Tetrachloroethane	ND		ug/l	2.0	--	2
Bromobenzene	ND		ug/l	4.0	--	2
n-Butylbenzene	ND		ug/l	4.0	--	2
sec-Butylbenzene	ND		ug/l	4.0	--	2
tert-Butylbenzene	ND		ug/l	4.0	--	2
o-Chlorotoluene	ND		ug/l	4.0	--	2
p-Chlorotoluene	ND		ug/l	4.0	--	2
1,2-Dibromo-3-chloropropane	ND		ug/l	4.0	--	2
Hexachlorobutadiene	ND		ug/l	1.2	--	2
Isopropylbenzene	ND		ug/l	4.0	--	2
p-Isopropyltoluene	ND		ug/l	4.0	--	2
Naphthalene	ND		ug/l	4.0	--	2
n-Propylbenzene	ND		ug/l	4.0	--	2



Project Name: 50 TUFTS STREET**Lab Number:** L2525591**Project Number:** 045163**Report Date:** 05/15/25**SAMPLE RESULTS**

Lab ID: L2525591-01 D
 Client ID: 045163-MW112A
 Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/25/25 10:45
 Date Received: 04/25/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	4.0	--	2
1,2,4-Trichlorobenzene	ND		ug/l	4.0	--	2
1,3,5-Trimethylbenzene	ND		ug/l	4.0	--	2
1,2,4-Trimethylbenzene	ND		ug/l	4.0	--	2
Diethyl ether	ND		ug/l	4.0	--	2
Diisopropyl Ether	ND		ug/l	4.0	--	2
Ethyl-Tert-Butyl-Ether	ND		ug/l	4.0	--	2
Tertiary-Amyl Methyl Ether	ND		ug/l	4.0	--	2
1,4-Dioxane	ND		ug/l	500	--	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	112		70-130



Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2525591
Report Date: 05/15/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 117,-
Analytical Date: 05/06/25 15:14
Analyst: BJB

Parameter	Result	Qualifier	Units	RL	MDL
Dissolved Gases by GC - Mansfield Air Lab for sample(s): 01 Batch: WG2063557-3					
Methane	ND		ug/l	5.00	-- A
Ethene	ND		ug/l	3.00	-- A
Ethane	ND		ug/l	3.00	-- A

Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2525591
Report Date: 05/15/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 141,8260D
 Analytical Date: 05/06/25 05:36
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01 Batch: WG2063955-5					
Methylene chloride	ND		ug/l	2.0	--
1,1-Dichloroethane	ND		ug/l	1.0	--
Chloroform	ND		ug/l	1.0	--
Carbon tetrachloride	ND		ug/l	1.0	--
1,2-Dichloropropane	ND		ug/l	1.0	--
Dibromochloromethane	ND		ug/l	1.0	--
1,1,2-Trichloroethane	ND		ug/l	1.0	--
Tetrachloroethene	ND		ug/l	1.0	--
Chlorobenzene	ND		ug/l	1.0	--
Trichlorofluoromethane	ND		ug/l	2.0	--
1,2-Dichloroethane	ND		ug/l	1.0	--
1,1,1-Trichloroethane	ND		ug/l	1.0	--
Bromodichloromethane	ND		ug/l	1.0	--
trans-1,3-Dichloropropene	ND		ug/l	0.40	--
cis-1,3-Dichloropropene	ND		ug/l	0.40	--
1,3-Dichloropropene, Total	ND		ug/l	0.40	--
1,1-Dichloropropene	ND		ug/l	2.0	--
Bromoform	ND		ug/l	2.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--
Benzene	ND		ug/l	0.50	--
Toluene	ND		ug/l	1.0	--
Ethylbenzene	ND		ug/l	1.0	--
Chloromethane	ND		ug/l	2.0	--
Bromomethane	ND		ug/l	2.0	--
Vinyl chloride	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	2.0	--
1,1-Dichloroethene	ND		ug/l	1.0	--
trans-1,2-Dichloroethene	ND		ug/l	1.0	--
Trichloroethene	ND		ug/l	1.0	--



Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2525591
Report Date: 05/15/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 141,8260D
 Analytical Date: 05/06/25 05:36
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01 Batch: WG2063955-5					
1,2-Dichlorobenzene	ND		ug/l	1.0	--
1,3-Dichlorobenzene	ND		ug/l	1.0	--
1,4-Dichlorobenzene	ND		ug/l	1.0	--
Methyl tert butyl ether	ND		ug/l	2.0	--
p/m-Xylene	ND		ug/l	2.0	--
o-Xylene	ND		ug/l	1.0	--
Xylenes, Total	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	1.0	--
1,2-Dichloroethene, Total	ND		ug/l	1.0	--
Dibromomethane	ND		ug/l	2.0	--
1,2,3-Trichloropropane	ND		ug/l	2.0	--
Styrene	ND		ug/l	1.0	--
Dichlorodifluoromethane	ND		ug/l	2.0	--
Acetone	ND		ug/l	5.0	--
Carbon disulfide	ND		ug/l	2.0	--
Methyl ethyl ketone	ND		ug/l	5.0	--
Methyl isobutyl ketone	ND		ug/l	5.0	--
2-Hexanone	ND		ug/l	5.0	--
Bromochloromethane	ND		ug/l	2.0	--
Tetrahydrofuran	ND		ug/l	2.0	--
2,2-Dichloropropane	ND		ug/l	2.0	--
1,2-Dibromoethane	ND		ug/l	2.0	--
1,3-Dichloropropane	ND		ug/l	2.0	--
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--
Bromobenzene	ND		ug/l	2.0	--
n-Butylbenzene	ND		ug/l	2.0	--
sec-Butylbenzene	ND		ug/l	2.0	--
tert-Butylbenzene	ND		ug/l	2.0	--
o-Chlorotoluene	ND		ug/l	2.0	--



Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2525591
Report Date: 05/15/25

Method Blank Analysis Batch Quality Control

Analytical Method: 141,8260D
Analytical Date: 05/06/25 05:36
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01 Batch: WG2063955-5					
p-Chlorotoluene	ND		ug/l	2.0	--
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--
Hexachlorobutadiene	ND		ug/l	0.60	--
Isopropylbenzene	ND		ug/l	2.0	--
p-Isopropyltoluene	ND		ug/l	2.0	--
Naphthalene	ND		ug/l	2.0	--
n-Propylbenzene	ND		ug/l	2.0	--
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--
Diethyl ether	ND		ug/l	2.0	--
Diisopropyl Ether	ND		ug/l	2.0	--
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--
1,4-Dioxane	ND		ug/l	250	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	113		70-130

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 50 TUFTS STREET

Project Number: 045163

Lab Number: L2525591

Report Date: 05/15/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Dissolved Gases by GC - Mansfield Air Lab Associated sample(s): 01 Batch: WG2063557-2									
Methane	106		-		80-120	-		25	A
Ethene	118		-		80-120	-		25	A
Ethane	111		-		80-120	-		25	A

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 50 TUFTS STREET

Project Number: 045163

Lab Number: L2525591

Report Date: 05/15/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG2063955-3 WG2063955-4								
Methylene chloride	100		100		70-130	0		20
1,1-Dichloroethane	100		100		70-130	0		20
Chloroform	100		100		70-130	0		20
Carbon tetrachloride	110		110		70-130	0		20
1,2-Dichloropropane	100		110		70-130	10		20
Dibromochloromethane	91		92		70-130	1		20
1,1,2-Trichloroethane	92		96		70-130	4		20
Tetrachloroethene	90		88		70-130	2		20
Chlorobenzene	92		93		70-130	1		20
Trichlorofluoromethane	100		99		70-130	1		20
1,2-Dichloroethane	98		97		70-130	1		20
1,1,1-Trichloroethane	100		100		70-130	0		20
Bromodichloromethane	97		100		70-130	3		20
trans-1,3-Dichloropropene	87		89		70-130	2		20
cis-1,3-Dichloropropene	94		96		70-130	2		20
1,1-Dichloropropene	96		96		70-130	0		20
Bromoform	87		87		70-130	0		20
1,1,2,2-Tetrachloroethane	90		89		70-130	1		20
Benzene	99		100		70-130	1		20
Toluene	90		91		70-130	1		20
Ethylbenzene	89		88		70-130	1		20
Chloromethane	120		130		70-130	8		20
Bromomethane	100		96		70-130	4		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 50 TUFTS STREET

Project Number: 045163

Lab Number: L2525591

Report Date: 05/15/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG2063955-3 WG2063955-4								
Vinyl chloride	86		86		70-130	0		20
Chloroethane	82		78		70-130	5		20
1,1-Dichloroethene	100		100		70-130	0		20
trans-1,2-Dichloroethene	98		98		70-130	0		20
Trichloroethene	95		99		70-130	4		20
1,2-Dichlorobenzene	91		89		70-130	2		20
1,3-Dichlorobenzene	90		88		70-130	2		20
1,4-Dichlorobenzene	90		90		70-130	0		20
Methyl tert butyl ether	92		94		70-130	2		20
p/m-Xylene	90		90		70-130	0		20
o-Xylene	90		90		70-130	0		20
cis-1,2-Dichloroethene	97		99		70-130	2		20
Dibromomethane	97		100		70-130	3		20
1,2,3-Trichloropropane	89		83		70-130	7		20
Styrene	85		85		70-130	0		20
Dichlorodifluoromethane	110		110		70-130	0		20
Acetone	100		82		70-130	20		20
Carbon disulfide	110		100		70-130	10		20
Methyl ethyl ketone	91		100		70-130	9		20
Methyl isobutyl ketone	81		83		70-130	2		20
2-Hexanone	82		84		70-130	2		20
Bromochloromethane	100		100		70-130	0		20
Tetrahydrofuran	110		120		70-130	9		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 50 TUFTS STREET

Project Number: 045163

Lab Number: L2525591

Report Date: 05/15/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG2063955-3 WG2063955-4								
2,2-Dichloropropane	98		99		70-130	1		20
1,2-Dibromoethane	93		96		70-130	3		20
1,3-Dichloropropane	92		93		70-130	1		20
1,1,1,2-Tetrachloroethane	91		93		70-130	2		20
Bromobenzene	90		90		70-130	0		20
n-Butylbenzene	91		88		70-130	3		20
sec-Butylbenzene	92		89		70-130	3		20
tert-Butylbenzene	92		91		70-130	1		20
o-Chlorotoluene	89		87		70-130	2		20
p-Chlorotoluene	89		89		70-130	0		20
1,2-Dibromo-3-chloropropane	89		84		70-130	6		20
Hexachlorobutadiene	89		86		70-130	3		20
Isopropylbenzene	89		88		70-130	1		20
p-Isopropyltoluene	94		90		70-130	4		20
Naphthalene	90		90		70-130	0		20
n-Propylbenzene	89		87		70-130	2		20
1,2,3-Trichlorobenzene	90		87		70-130	3		20
1,2,4-Trichlorobenzene	86		87		70-130	1		20
1,3,5-Trimethylbenzene	90		88		70-130	2		20
1,2,4-Trimethylbenzene	91		88		70-130	3		20
Diethyl ether	110		110		70-130	0		20
Diisopropyl Ether	100		110		70-130	10		20
Ethyl-Tert-Butyl-Ether	91		97		70-130	6		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 50 TUFTS STREET

Project Number: 045163

Lab Number: L2525591

Report Date: 05/15/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG2063955-3 WG2063955-4								
Tertiary-Amyl Methyl Ether	85		88		70-130	3		20
1,4-Dioxane	64	Q	74		70-130	14		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	99		98		70-130
Toluene-d8	99		98		70-130
4-Bromofluorobenzene	94		92		70-130
Dibromofluoromethane	105		104		70-130

Matrix Spike Analysis **Batch Quality Control**

Project Name: 50 TUFTS STREET

Project Number: 045163

Lab Number: L2525591

Report Date: 05/15/25

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>	<i>Column</i>
Dissolved Gases by GC - Mansfield Air Lab Associated sample(s): 01 QC Batch ID: WG2063557-5 QC Sample: L2525591-01 Client ID: 045163-MW112A													
Methane	5.31	54.6	57.9	96		-	-		80-120	-		25	A
Ethene	ND	95.5	107	112		-	-		80-120	-		25	A
Ethane	ND	102	106	104		-	-		80-120	-		25	A

METALS

Project Name: 50 TUFTS STREET**Lab Number:** L2525591**Project Number:** 045163**Report Date:** 05/15/25**SAMPLE RESULTS**

Lab ID: L2525591-01

Date Collected: 04/25/25 10:45

Client ID: 045163-MW112A

Date Received: 04/25/25

Sample Location: SOMERVILLE, MASSACHUSETTS

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Total Metals - Mansfield Lab											
Manganese, Total	1.48		mg/l	0.0100	--	1	05/01/25 10:33	05/06/25 18:06	EPA 3005A	97,6010D	EFM



Project Name: 50 TUFTS STREET

Lab Number: L2525591

Project Number: 045163

Report Date: 05/15/25

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Total Metals - Mansfield Lab for sample(s): 01 Batch: WG2061072-1										
Manganese, Total	ND		mg/l	0.0100	--	1	05/01/25 10:33	05/01/25 17:29	97,6010D	DMC

Prep Information

Digestion Method: EPA 3005A



Lab Control Sample Analysis **Batch Quality Control**

Project Name: 50 TUFTS STREET

Project Number: 045163

Lab Number: L2525591

Report Date: 05/15/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG2061072-2 WG2061072-3								
Manganese, Total	102		102		80-120	0		20

INORGANICS & MISCELLANEOUS

Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2525591
Report Date: 05/15/25

SAMPLE RESULTS

Lab ID: L2525591-01
Client ID: 045163-MW112A
Sample Location: SOMERVILLE, MASSACHUSETTS

Date Collected: 04/25/25 10:45
Date Received: 04/25/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Alkalinity, Total	246.		mg CaCO3/L	2.00	NA	1	-	05/05/25 11:49	121,2320B	MKT
Chlorine, Total Residual	0.06		mg/l	0.02	--	1	04/26/25 09:20	04/26/25 09:43	121,4500CL-G	DMO
Chloride	490		mg/l	25	--	25	-	05/03/25 04:57	1,9251	MRM
Nitrogen, Nitrate	0.307		mg/l	0.100	--	1	-	04/26/25 09:06	121,4500NO3-F	MRM
Nitrogen, Nitrate/Nitrite	0.36		mg/l	0.10	--	1	-	05/06/25 07:42	121,4500NO3-F	KAF
Total Nitrogen	0.69		mg/l	0.30	--	1	-	05/14/25 15:58	107,-	JRO
Nitrogen, Total Kjeldahl	0.326		mg/l	0.300	--	1	05/12/25 22:54	05/13/25 21:14	121,4500NH3-H	AT
Sulfate	71.		mg/l	25	--	2.5	05/06/25 11:15	05/06/25 11:15	1,9038	MRW
Total Organic Carbon	ND		mg/l	0.50	--	1	-	05/01/25 02:02	1,9060A	DEW
Surfactants, MBAS	ND		mg/l	0.050	--	1	04/26/25 05:00	04/26/25 07:53	121,5540C	CAR
Iron, Ferrous	ND		mg/l	0.50	--	1	-	04/26/25 04:52	121,3500FE-B	CAR



Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2525591
Report Date: 05/15/25

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG2058916-1										
Nitrogen, Nitrate	ND		mg/l	0.100	--	1	-	04/26/25 07:08	121,4500NO3-F	MRM
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG2058920-1										
Iron, Ferrous	ND		mg/l	0.50	--	1	-	04/26/25 04:51	121,3500FE-B	CAR
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG2058927-1										
Surfactants, MBAS	ND		mg/l	0.050	--	1	04/26/25 05:00	04/26/25 07:50	121,5540C	CAR
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG2058962-1										
Chlorine, Total Residual	ND		mg/l	0.02	--	1	04/26/25 09:20	04/26/25 09:41	121,4500CL-G	DMO
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG2060942-1										
Total Organic Carbon	ND		mg/l	0.50	--	1	-	05/01/25 02:02	1,9060A	DEW
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG2061856-1										
Chloride	ND		mg/l	1.0	--	1	-	05/03/25 04:01	1,9251	MRM
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG2062479-1										
Alkalinity, Total	ND		mg CaCO3/L	2.00	NA	1	-	05/05/25 10:41	121,2320B	MKT
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG2062765-1										
Nitrogen, Nitrate/Nitrite	ND		mg/l	0.10	--	1	-	05/06/25 05:19	121,4500NO3-F	KAF
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG2062963-1										
Sulfate	ND		mg/l	10	--	1	05/06/25 11:15	05/06/25 11:15	1,9038	MRW
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG2065597-1										
Nitrogen, Total Kjeldahl	ND		mg/l	0.300	--	1	05/12/25 22:54	05/13/25 21:11	121,4500NH3-H	AT



Lab Control Sample Analysis **Batch Quality Control**

Project Name: 50 TUFTS STREET

Project Number: 045163

Lab Number: L2525591

Report Date: 05/15/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG2058916-2								
Nitrogen, Nitrate	97		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG2058920-2								
Iron, Ferrous	109		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG2058927-2								
Surfactants, MBAS	96		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG2058962-2								
Chlorine, Total Residual	101		-		90-110	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG2060942-2								
Total Organic Carbon	100		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG2061856-2								
Chloride	93		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG2062479-2								
Alkalinity, Total	98		-		90-110	-		10

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 50 TUFTS STREET

Project Number: 045163

Lab Number: L2525591

Report Date: 05/15/25

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG2062765-2					
Nitrogen, Nitrate/Nitrite	98	-	90-110	-	20
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG2062963-2					
Sulfate	100	-	90-110	-	
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG2065597-2					
Nitrogen, Total Kjeldahl	88	-	78-122	-	

Matrix Spike Analysis

Batch Quality Control

Project Name: 50 TUFTS STREET

Project Number: 045163

Lab Number: L2525591

Report Date: 05/15/25

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG2058916-4 QC Sample: L2525591-01 Client ID: 045163-MW112A												
Nitrogen, Nitrate	0.307	4	3.86	89		-	-		83-113	-		17
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG2058920-4 QC Sample: L2525591-01 Client ID: 045163-MW112A												
Iron, Ferrous	ND	1	1.1	108		-	-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG2065597-4 QC Sample: L2525591-01 Client ID: 045163-MW112A												
Nitrogen, Total Kjeldahl	0.326	8	8.10	97		-	-		77-111	-		24

Lab Duplicate Analysis

Batch Quality Control

Project Name: 50 TUFTS STREET

Project Number: 045163

Lab Number: L2525591

Report Date: 05/15/25

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG2058916-3 QC Sample: L2525591-01 Client ID: 045163-MW112A						
Nitrogen, Nitrate	0.307	0.302	mg/l	2		17
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG2058920-3 QC Sample: L2525591-01 Client ID: 045163-MW112A						
Iron, Ferrous	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG2065597-3 QC Sample: L2525591-01 Client ID: 045163-MW112A						
Nitrogen, Total Kjeldahl	0.326	0.448	mg/l	32	Q	24

Project Name: 50 TUFTS STREET
Project Number: 045163

Serial_No:05152513:22
Lab Number: L2525591
Report Date: 05/15/25

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler **Custody Seal**
A Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2525591-01A	Vial HCl preserved	A	NA		5.1	Y	Absent		MCP-8260-21(14)
L2525591-01B	Vial HCl preserved	A	NA		5.1	Y	Absent		MCP-8260-21(14)
L2525591-01C	Vial HCl preserved	A	NA		5.1	Y	Absent		MCP-8260-21(14)
L2525591-01D	20ml Vial HCl preserved	A	NA		5.1	Y	Absent		DISSGAS(14)
L2525591-01E	20ml Vial HCl preserved	A	NA		5.1	Y	Absent		DISSGAS(14)
L2525591-01F	Vial H2SO4 preserved	A	NA		5.1	Y	Absent		TOC-9060(28)
L2525591-01G	Vial H2SO4 preserved	A	NA		5.1	Y	Absent		TOC-9060(28)
L2525591-01H	Plastic 250ml unpreserved/No Headspace	A	NA		5.1	Y	Absent		ALK-T-2320(14)
L2525591-01I	Plastic 250ml HNO3 preserved	A	<2	<2	5.1	Y	Absent		MCP-MN-6010T-10(180)
L2525591-01J	Plastic 250ml Zn Acetate/NaOH preserved	A	>9	>9	5.1	Y	Absent		SUB-SULFIDE(7)
L2525591-01K	Plastic 250ml H2SO4 preserved	A	<2	<2	5.1	Y	Absent		TKN-4500(28),NO3/NO2-4500(28),TNITROGEN(28)
L2525591-01L	Plastic 950ml unpreserved	A	7	7	5.1	Y	Absent		TRC-4500-G(1),SO4-9038(28),CL-9251(28),NO3-4500(2),MBAS-5540(2),FERROUS(1)
L2525591-01M	Plastic 950ml unpreserved	A	7	7	5.1	Y	Absent		TRC-4500-G(1),SO4-9038(28),CL-9251(28),NO3-4500(2),MBAS-5540(2),FERROUS(1)

Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2525591
Report Date: 05/15/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report



Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2525591
Report Date: 05/15/25

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

Report Format: Data Usability Report



Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2525591
Report Date: 05/15/25

Data Qualifiers

- ND** - Not detected at the reporting limit (RL) for the sample.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: 50 TUFTS STREET**Lab Number:** L2525591**Project Number:** 045163**Report Date:** 05/15/25

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.
- 97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSCCAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010; WSC-CAM-IIIA and IIID, January 2024; WSC-CAM-IIIB and VA, February 2024; WSC-CAM-VB and VC, April 2024; and WSC-CAM-VIA, VIB, IXA, and IXB, October 2024.
- 107 Calculation method.
- 117 Technical Guidance for the Natural Attenuation Indicators: Methane, Ethane, and Ethene, EPA-NE, Revision 1, February 21, 2002 and Sample Preparation & Calculations for Dissolved Gas Analysis in Water Samples using a GC Headspace Equilibration Technique, EPA RSKSOP-175, Revision 2, May 2004.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.
- 141 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA and IIB, November 2021.

LIMITATION OF LIABILITIES

Pace Analytical Services performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Pace Analytical Services shall be to re-perform the work at it's own expense. In no event shall Pace Analytical Services be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Pace Analytical Services.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Pace Analytical Services LLCFacility: **Northeast**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

Revision 27

Published Date: 01/24/2025

Page 1 of 2

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**EPA 624.1:** m/p-xylene, o-xylene, Naphthalene**EPA 625.1:** alpha-Terpineol**EPA 8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****SM 2540D:** TSS.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

MADEP-APH.**Nonpotable Water:** EPA RSK-175 Dissolved Gases**Biological Tissue Matrix:** EPA 3050B**Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048****EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048**Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)**

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables).**Microbiology:** SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.** **EPA 522, EPA 537.1.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1 Hg.****SM2340B**

Pace Analytical Services LLCID No.: **17873**Facility: **Northeast**

Revision 27

Department: **Quality Assurance**

Published Date: 01/24/2025

Title: **Certificate/Approval Program Summary**

Page 2 of 2

Certification IDs:**Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**

CT PH-0826, IL 200077, IN C-MA-03, KY JY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 3090, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048

ANAB/DoD L2474, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

For a complete listing of analytes and methods, please contact your Project Manager.

Method Blank Summary Form 4 Volatiles

Client	: GEI Consultants	Lab Number	: L2525591
Project Name	: 50 TUFTS STREET	Project Number	: 045163
Lab Sample ID	: WG2063955-5	Lab File ID	: J250506A05
Instrument ID	: JACK		
Matrix	: WATER	Analysis Date	: 05/06/25 05:36

Client Sample No.	Lab Sample ID	Analysis Date
WG2063955-3LCS	WG2063955-3	05/06/25 04:15
WG2063955-4LCSD	WG2063955-4	05/06/25 04:42
045163-MW112A	L2525591-01D	05/06/25 14:06

Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : 50 TUFTS STREET
 Instrument ID : JACK
 Lab File ID : J250506A02
 Sample No : WG2063955-2
 Channel :

Lab Number : L2525591
 Project Number : 045163
 Calibration Date : 05/06/25 04:15
 Init. Calib. Date(s) : 02/28/25 02/28/25
 Init. Calib. Times : 05:35 08:42

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	102	0
Dichlorodifluoromethane	0.28	0.316	-	-12.9	20	113	0
Chloromethane	0.294	0.361	-	-22.8*	20	125	0
Vinyl chloride	0.352	0.302	-	14.2	20	85	0
Bromomethane	0.178	0.178	-	0	20	106	0
Chloroethane	0.189	0.156	-	17.5	20	82	0
Trichlorofluoromethane	0.411	0.413	-	-0.5	20	99	0
Ethyl ether	0.116	0.127	-	-9.5	20	110	0
1,1-Dichloroethene	0.228	0.231	-	-1.3	20	103	0
Carbon disulfide	0.7	0.742	-	-6	20	109	0
Freon-113	0.246	0.254	-	-3.3	20	105	0
Acrolein	0.041	0.046	-	-12.2	20	120	0
Methylene chloride	0.247	0.252	-	-2	20	105	0
Acetone	0.077	0.078	-	-1.3	20	108	0
trans-1,2-Dichloroethene	0.247	0.243	-	1.6	20	98	0
Methyl acetate	0.167	0.19	-	-13.8	20	119	0
Methyl tert-butyl ether	0.682	0.628	-	7.9	20	94	0
tert-Butyl alcohol	0.026	0.022	-	15.4	20	76	0
Diisopropyl ether	0.875	0.903	-	-3.2	20	106	0
1,1-Dichloroethane	0.492	0.514	-	-4.5	20	107	0
Halothane	0.201	0.201	-	0	20	100	0
Acrylonitrile	0.082	0.093	-	-13.4	20	115	0
Ethyl tert-butyl ether	0.785	0.717	-	8.7	20	95	0
Vinyl acetate	0.688	0.609	-	11.5	20	93	0
cis-1,2-Dichloroethene	0.272	0.264	-	2.9	20	99	0
2,2-Dichloropropane	0.423	0.416	-	1.7	20	102	0
Bromochloromethane	0.122	0.127	-	-4.1	20	102	0
Cyclohexane	0.51	0.536	-	-5.1	20	108	0
Chloroform	0.462	0.467	-	-1.1	20	106	0
Ethyl acetate	0.269	0.271	-	-0.7	20	103	0
Carbon tetrachloride	0.363	0.392	-	-8	20	107	0
Tetrahydrofuran	0.095	0.104	-	-9.5	20	109	-.01
Dibromofluoromethane	0.264	0.276	-	-4.5	20	106	0
1,1,1-Trichloroethane	0.408	0.42	-	-2.9	20	105	0
2-Butanone	0.121	0.11	-	9.1	20	95	0
1,1-Dichloropropene	0.335	0.321	-	4.2	20	96	0
Benzene	1.011	1.002	-	0.9	20	103	0
tert-Amyl methyl ether	0.688	0.586	-	14.8	20	86	0
1,2-Dichloroethane-d4	0.324	0.321	-	0.9	20	103	0
1,2-Dichloroethane	0.355	0.347	-	2.3	20	100	0
Methyl cyclohexane	0.47	0.449	-	4.5	20	101	0
Trichloroethene	0.271	0.258	-	4.8	20	96	0
Dibromomethane	0.153	0.149	-	2.6	20	96	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : 50 TUFTS STREET
 Instrument ID : JACK
 Lab File ID : J250506A02
 Sample No : WG2063955-2
 Channel :

Lab Number : L2525591
 Project Number : 045163
 Calibration Date : 05/06/25 04:15
 Init. Calib. Date(s) : 02/28/25 02/28/25
 Init. Calib. Times : 05:35 08:42

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,2-Dichloropropane	0.262	0.267	-	-1.9	20	97	0
2-Chloroethyl vinyl ether	0.159	0.12	-	24.5*	20	72	0
Bromodichloromethane	0.344	0.335	-	2.6	20	95	0
1,4-Dioxane	0.00217	0.00141*	-	35*	20	68	-.01
cis-1,3-Dichloropropene	0.409	0.386	-	5.6	20	91	0
Chlorobenzene-d5	1	1	-	0	20	106	0
Toluene-d8	1.318	1.311	-	0.5	20	106	0
Toluene	0.882	0.793	-	10.1	20	95	0
4-Methyl-2-pentanone	0.125	0.102	-	18.4	20	82	0
Tetrachloroethene	0.411	0.37	-	10	20	95	0
trans-1,3-Dichloropropene	0.495	0.431	-	12.9	20	88	0
Ethyl methacrylate	0.424	0.337	-	20.5*	20	80	0
1,1,2-Trichloroethane	0.262	0.241	-	8	20	90	0
Chlorodibromomethane	0.365	0.332	-	9	20	92	0
1,3-Dichloropropane	0.486	0.446	-	8.2	20	94	0
1,2-Dibromoethane	0.295	0.275	-	6.8	20	93	0
2-Hexanone	0.255	0.209	-	18	20	81	0
Chlorobenzene	0.973	0.901	-	7.4	20	94	0
Ethylbenzene	1.752	1.554	-	11.3	20	93	0
1,1,1,2-Tetrachloroethane	0.357	0.327	-	8.4	20	93	0
p/m Xylene	0.685	0.614	-	10.4	20	95	0
o Xylene	0.658	0.598	-	9.1	20	95	0
Styrene	1.121	0.974	-	13.1	20	90	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	107	0
Bromoform	0.441	0.383	-	13.2	20	86	0
Isopropylbenzene	3.009	2.677	-	11	20	93	0
4-Bromofluorobenzene	0.855	0.808	-	5.5	20	103	0
Bromobenzene	0.72	0.649	-	9.9	20	91	0
n-Propylbenzene	3.645	3.234	-	11.3	20	93	0
1,4-Dichlorobutane	0.953	0.905	-	5	20	99	0
1,1,2,2-Tetrachloroethane	0.7	0.628	-	10.3	20	88	0
4-Ethyltoluene	2.97	2.71	-	8.8	20	96	0
2-Chlorotoluene	2.404	2.143	-	10.9	20	93	0
1,3,5-Trimethylbenzene	2.587	2.33	-	9.9	20	95	0
1,2,3-Trichloropropane	0.56	0.497	-	11.3	20	89	0
trans-1,4-Dichloro-2-buten	0.238	0.198	-	16.8	20	82	0
4-Chlorotoluene	2.179	1.937	-	11.1	20	92	0
tert-Butylbenzene	2.151	1.981	-	7.9	20	97	0
1,2,4-Trimethylbenzene	2.516	2.286	-	9.1	20	95	0
sec-Butylbenzene	3.283	3.035	-	7.6	20	98	0
p-Isopropyltoluene	2.792	2.626	-	5.9	20	99	0
1,3-Dichlorobenzene	1.47	1.317	-	10.4	20	92	0
1,4-Dichlorobenzene	1.47	1.33	-	9.5	20	93	0

* Value outside of QC limits.

Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : 50 TUFTS STREET
 Instrument ID : JACK
 Lab File ID : J250506A02
 Sample No : WG2063955-2
 Channel :

Lab Number : L2525591
 Project Number : 045163
 Calibration Date : 05/06/25 04:15
 Init. Calib. Date(s) : 02/28/25 02/28/25
 Init. Calib. Times : 05:35 08:42

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
p-Diethylbenzene	1.637	1.523	-	7	20	98	0
n-Butylbenzene	2.502	2.284	-	8.7	20	97	0
1,2-Dichlorobenzene	1.362	1.238	-	9.1	20	93	0
1,2,4,5-Tetramethylbenzene	2.513	2.164	-	13.9	20	92	0
1,2-Dibromo-3-chloropropan	0.133	0.118	-	11.3	20	91	0
1,3,5-Trichlorobenzene	1.072	0.948	-	11.6	20	93	0
Hexachlorobutadiene	0.458	0.408	-	10.9	20	99	0
1,2,4-Trichlorobenzene	0.948	0.813	-	14.2	20	91	0
Naphthalene	2.388	2.157	-	9.7	20	94	0
1,2,3-Trichlorobenzene	0.868	0.78	-	10.1	20	94	0

* Value outside of QC limits.

May 2, 2025

Jennifer Byrnes
Pace Analytical Services - Westborough, MA
8 Walkup Drive
Westborough, MA 01581

Project Location: L2525591
Client Job Number:
Project Number: L2525591
Laboratory Work Order Number: 25D2215

Enclosed are results of analyses for samples as received by the laboratory on April 28, 2025. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Rebecca Faust
Project Manager

Table of Contents

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Pace Analytical Services, LLC - East Longmeadow, Ma

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Pace Analytical Services - Westborough, MA
8 Walkup Drive
Westborough, MA 01581
ATTN: Jennifer Byrnes

REPORT DATE: 5/2/2025

PURCHASE ORDER NUMBER:

PROJECT NUMBER: L2525591

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 25D2215

The results of analyses performed on the following samples submitted to Pace Analytical Services, LLC - East Longmeadow, Ma, are found in this report.

PROJECT LOCATION: L2525591

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
045163-MW112A	25D2215-01	Ground Water		SM21-24 4500S-F	

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to Pace Analytical Services, LLC - East Longmeadow, Ma, for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Lisa A. Worthington
Technical Representative



Pace Analytical Services, LLC - East Longmeadow, Ma

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: L2525591

Sample Description:

Work Order: 25D2215

Date Received: 4/28/2025

Field Sample #: 045163-MW112A

Sampled: 4/25/2025 10:45

Sample ID: 25D2215-01

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Sulfide	ND	2.0	mg/L	1		SM21-24 4500S-F	5/1/25	5/1/25 16:20	EC



Pace Analytical Services, LLC - East Longmeadow, Ma

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332**Sample Extraction Data**

SM21-24 4500S-F

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
25D2215-01 [045163-MW112A]	B404219	200	200	05/01/25



Pace Analytical Services, LLC - East Longmeadow, Ma

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B404219 - SM21-24 4500S-F

Blank (B404219-BLK1)

Prepared & Analyzed: 05/01/25

Sulfide	ND	2.0	mg/L
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LCS (B404219-BS1)

Prepared & Analyzed: 05/01/25

Sulfide	8.2	2.0	mg/L	10.05	81.6	72.4-110
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LCS Dup (B404219-BSD1)

Prepared & Analyzed: 05/01/25

Sulfide	8.6	2.0	mg/L	10.05	85.6	72.4-110	4.76	9.91
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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.	
No results have been blank subtracted unless specified in the case narrative section.	



Pace Analytical Services, LLC - East Longmeadow, Ma

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS**Certified Analyses included in this Report**

Analyte	Certifications
---------	----------------

SM21-24 4500S-F in Water

Sulfide	NY,NH,RI,NC,ME,CT
---------	-------------------

Pace Analytical Services, LLC - East Longmeadow, Ma, operates under the following certifications and accreditations:

Code	Description	Number	Expires
CT	Connecticut Department of Public Health	PH-0821	12/31/2026
NY	New York State Department of Health	10899 NELAP	04/1/2026
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2026
RI	Rhode Island Department of Health	LAO00373	12/30/2025
NC	North Carolina Div. of Water Quality	652	12/31/2025
ME	State of Maine	MA00100	06/9/2025

Page 56 of 58

Effective Date: 06/11/2024

[illegible]

	DC#_Title: ENV-FRM-ELON-0001 v08_Sample Receiving Checklist	Effective Date: 06/11/2024
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ANALYTICAL REPORT

Lab Number:	L2507880
Client:	GEI Consultants 400 Unicorn Park Drive Woburn, MA 01801
ATTN:	Chris Coner
Phone:	(781) 721-4000
Project Name:	TUFTS STREET
Project Number:	045163
Report Date:	02/26/25

The original project report/data package is held by Pace Analytical Services. This report/data package is paginated and should be reproduced only in its entirety. Pace Analytical Services holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: NH ELAP (2249).

120 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.pacelabs.com



Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2507880
Report Date: 02/26/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2507880-01	045163-105WASH-F1	AIR	SOMERVILLE, MA	02/11/25 11:12	02/12/25
L2507880-02	045163-105WASH-B1	AIR	SOMERVILLE, MA	02/11/25 10:36	02/12/25
L2507880-03	045163-105WASH-B2	AIR	SOMERVILLE, MA	02/11/25 11:14	02/12/25
L2507880-04	045163-105WASH-F2	AIR	SOMERVILLE, MA	02/11/25 11:19	02/12/25
L2507880-05	045163-105WASH-SV2	SOIL_VAPOR	SOMERVILLE, MA	02/11/25 12:50	02/12/25

Project Name: TUFTS STREET

Lab Number: L2507880

Project Number: 045163

Report Date: 02/26/25

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	NO
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES
A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	YES
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	NO
For any questions answered "No", please refer to the case narrative section on the following page(s).		

Please note that sample matrix information is located in the Sample Results section of this report.



Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2507880
Report Date: 02/26/25

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Pace Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Pace's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Pace Project Manager and made arrangements for Pace to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2507880
Report Date: 02/26/25

Case Narrative (continued)

MCP Related Narratives

Canisters were released from the laboratory on February 6, 2025. The canister certification data is provided as an addendum.

MCP Volatile Organics in Air

In reference to questions E b/I:

All samples were analyzed for a subset of the MCP compounds per the Chain of Custody.

Sample Receipt

L2507880-05: The sample had an RPD for the pre- and post-flow controller calibration check (53% RPD) that was outside of the control limit (20% RPD). The final pressure recorded by the laboratory of the associated canister was 0.0 inches of mercury. No further action was required.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Christopher J. Anderson

Title: Technical Director/Representative

Date: 02/26/25

QC OUTLIER SUMMARY REPORT

Project Name: TUFTS STREET**Lab Number:** L2507880**Project Number:** 045163**Report Date:** 02/26/25

Method	Client ID (Native ID)	Lab ID	Parameter	QC Type	Recovery/RPD (%)	QC Limits (%)	Associated Samples	Data Quality Assessment
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There are no QC Outliers associated with this report.

AIR

Project Name: TUFTS STREET**Project Number:** 045163**Lab Number:** L2507880**Report Date:** 02/26/25**SAMPLE RESULTS**

Lab ID: L2507880-01
 Client ID: 045163-105WASH-F1
 Sample Location: SOMERVILLE, MA

Date Collected: 02/11/25 11:12
 Date Received: 02/12/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 02/25/25 03:21
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	0.022	0.020	--	0.087	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.104	0.020	--	0.705	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	86		60-140
bromochloromethane	87		60-140
chlorobenzene-d5	92		60-140



Project Name: TUFTS STREET**Project Number:** 045163**Lab Number:** L2507880**Report Date:** 02/26/25**SAMPLE RESULTS**

Lab ID: L2507880-02
 Client ID: 045163-105WASH-B1
 Sample Location: SOMERVILLE, MA

Date Collected: 02/11/25 10:36
 Date Received: 02/12/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 02/25/25 04:00
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.115	0.020	--	0.780	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	86		60-140
bromochloromethane	87		60-140
chlorobenzene-d5	92		60-140



Project Name: TUFTS STREET**Project Number:** 045163**Lab Number:** L2507880**Report Date:** 02/26/25**SAMPLE RESULTS**

Lab ID: L2507880-03
 Client ID: 045163-105WASH-B2
 Sample Location: SOMERVILLE, MA

Date Collected: 02/11/25 11:14
 Date Received: 02/12/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 02/25/25 04:40
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.043	0.020	--	0.292	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	84		60-140
bromochloromethane	86		60-140
chlorobenzene-d5	90		60-140



Project Name: TUFTS STREET**Project Number:** 045163**Lab Number:** L2507880**Report Date:** 02/26/25**SAMPLE RESULTS**

Lab ID: L2507880-04
 Client ID: 045163-105WASH-F2
 Sample Location: SOMERVILLE, MA

Date Collected: 02/11/25 11:19
 Date Received: 02/12/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 02/25/25 05:20
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.040	0.020	--	0.271	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	80		60-140
bromochloromethane	83		60-140
chlorobenzene-d5	86		60-140



Project Name: TUFTS STREET**Project Number:** 045163**Lab Number:** L2507880**Report Date:** 02/26/25**SAMPLE RESULTS**

Lab ID: L2507880-05
 Client ID: 045163-105WASH-SV2
 Sample Location: SOMERVILLE, MA

Date Collected: 02/11/25 12:50
 Date Received: 02/12/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil_Vapor
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 02/26/25 04:59
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	0.053	0.020	--	0.210	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.062	0.020	--	0.420	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	87		60-140
bromochloromethane	93		60-140
chlorobenzene-d5	92		60-140



Project Name: TUFTS STREET

Lab Number: L2507880

Project Number: 045163

Report Date: 02/26/25

Method Blank Analysis Batch Quality Control

Analytical Method: 101,TO-15-SIM

Analytical Date: 02/24/25 13:55

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01-04 Batch: WG2033510-4								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1



Project Name: TUFTS STREET

Lab Number: L2507880

Project Number: 045163

Report Date: 02/26/25

Method Blank Analysis Batch Quality Control

Analytical Method: 101,TO-15-SIM

Analytical Date: 02/25/25 16:13

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 05 Batch: WG2034026-4								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1



Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2507880

Report Date: 02/26/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-04 Batch: WG2033510-3								
Vinyl chloride	130		-		70-130	-		
1,1-Dichloroethene	96		-		70-130	-		
trans-1,2-Dichloroethene	104		-		70-130	-		
1,1-Dichloroethane	96		-		70-130	-		
cis-1,2-Dichloroethene	94		-		70-130	-		
1,1,1-Trichloroethane	100		-		70-130	-		
Trichloroethene	96		-		70-130	-		
1,1,2-Trichloroethane	89		-		70-130	-		
Tetrachloroethene	101		-		70-130	-		
1,1,2,2-Tetrachloroethane	102		-		70-130	-		

Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2507880

Report Date: 02/26/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 05 Batch: WG2034026-3								
Vinyl chloride	105		-		70-130	-		
1,1-Dichloroethene	127		-		70-130	-		
trans-1,2-Dichloroethene	120		-		70-130	-		
1,1-Dichloroethane	123		-		70-130	-		
cis-1,2-Dichloroethene	122		-		70-130	-		
1,1,1-Trichloroethane	115		-		70-130	-		
Trichloroethene	114		-		70-130	-		
1,1,2-Trichloroethane	114		-		70-130	-		
Tetrachloroethene	108		-		70-130	-		
1,1,2,2-Tetrachloroethane	124		-		70-130	-		

Project Name: TUFTS STREET

Serial_No: 02262515:53
Lab Number: L2507880

Project Number: 045163

Report Date: 02/26/25

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt	Flow Controller Leak Chk	Flow Out mL/min	Flow In	% RPD
L2507880-01	045163-105WASH-F1	02797	Flow 5	02/06/25	504387		-	-	-	Pass	3.0	3.3	10
L2507880-01	045163-105WASH-F1	5427	6.0L Can	02/06/25	504387	L2505816-07	Pass	-29.9	-8.9	-	-	-	-
L2507880-02	045163-105WASH-B1	02264	Flow 1	02/06/25	504387		-	-	-	Pass	3.0	3.5	15
L2507880-02	045163-105WASH-B1	3351	6.0L Can	02/06/25	504387	L2505816-07	Pass	-30.2	0.0	-	-	-	-
L2507880-03	045163-105WASH-B2	02771	Flow 5	02/06/25	504387		-	-	-	Pass	3.0	3.4	13
L2507880-03	045163-105WASH-B2	5436	6.0L Can	02/06/25	504387	L2505816-06	Pass	-29.7	-7.6	-	-	-	-
L2507880-04	045163-105WASH-F2	02273	Flow 5	02/06/25	504387		-	-	-	Pass	3.0	3.3	10
L2507880-04	045163-105WASH-F2	3315	6.0L Can	02/06/25	504387	L2505816-07	Pass	-30.2	-9.1	-	-	-	-
L2507880-05	045163-105WASH-SV2	0438	Flow 1	02/06/25	504387		-	-	-	Pass	36.0	62	53
L2507880-05	045163-105WASH-SV2	1746	2.7L Can	02/06/25	504387	L2505616-02	Pass	-30.2	0.0	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2505616
Report Date: 02/26/25

Air Canister Certification Results

Lab ID: L2505616-02
Client ID: CAN 3184 SHELF 16
Sample Location:

Date Collected: 02/01/25 07:00
Date Received: 02/01/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 02/02/25 19:25
Analyst: JFI

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	1.00	--	ND	2.46	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2505616
Report Date: 02/26/25

Air Canister Certification Results

Lab ID: L2505616-02
Client ID: CAN 3184 SHELF 16
Sample Location:

Date Collected: 02/01/25 07:00
Date Received: 02/01/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2505616
Report Date: 02/26/25

Air Canister Certification Results

Lab ID: L2505616-02
Client ID: CAN 3184 SHELF 16
Sample Location:

Date Collected: 02/01/25 07:00
Date Received: 02/01/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2505616
Report Date: 02/26/25

Air Canister Certification Results

Lab ID: L2505616-02
Client ID: CAN 3184 SHELF 16
Sample Location:

Date Collected: 02/01/25 07:00
Date Received: 02/01/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	0.996	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2505616
Report Date: 02/26/25

Air Canister Certification Results

Lab ID: L2505616-02
 Client ID: CAN 3184 SHELF 16
 Sample Location:

Date Collected: 02/01/25 07:00
 Date Received: 02/01/25
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				
No Tentatively Identified Compounds				

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	105		60-140
Bromochloromethane	109		60-140
chlorobenzene-d5	108		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2505616
Report Date: 02/26/25

Air Canister Certification Results

Lab ID: L2505616-02
Client ID: CAN 3184 SHELF 16
Sample Location:

Date Collected: 02/01/25 07:00
Date Received: 02/01/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 02/02/25 19:25
Analyst: JFI

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2505616
Report Date: 02/26/25

Air Canister Certification Results

Lab ID: L2505616-02
Client ID: CAN 3184 SHELF 16
Sample Location:

Date Collected: 02/01/25 07:00
Date Received: 02/01/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2505616**Project Number:** CANISTER QC BAT**Report Date:** 02/26/25**Air Canister Certification Results**

Lab ID: L2505616-02

Date Collected: 02/01/25 07:00

Client ID: CAN 3184 SHELF 16

Date Received: 02/01/25

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	109		60-140
bromochloromethane	114		60-140
chlorobenzene-d5	111		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2505816
Report Date: 02/26/25

Air Canister Certification Results

Lab ID: L2505816-06
Client ID: CAN 4341 SHELF 53
Sample Location:

Date Collected: 02/03/25 18:00
Date Received: 02/04/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 02/04/25 21:09
Analyst: JMB

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	1.00	--	ND	2.46	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2505816
Report Date: 02/26/25

Air Canister Certification Results

Lab ID: L2505816-06
Client ID: CAN 4341 SHELF 53
Sample Location:

Date Collected: 02/03/25 18:00
Date Received: 02/04/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2505816
Report Date: 02/26/25

Air Canister Certification Results

Lab ID: L2505816-06
Client ID: CAN 4341 SHELF 53
Sample Location:

Date Collected: 02/03/25 18:00
Date Received: 02/04/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2505816
Report Date: 02/26/25

Air Canister Certification Results

Lab ID: L2505816-06
Client ID: CAN 4341 SHELF 53
Sample Location:

Date Collected: 02/03/25 18:00
Date Received: 02/04/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	0.996	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2505816**Project Number:** CANISTER QC BAT**Report Date:** 02/26/25**Air Canister Certification Results**

Lab ID: L2505816-06

Date Collected: 02/03/25 18:00

Client ID: CAN 4341 SHELF 53

Date Received: 02/04/25

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				
No Tentatively Identified Compounds				

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	107		60-140
Bromochloromethane	109		60-140
chlorobenzene-d5	108		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2505816
Report Date: 02/26/25

Air Canister Certification Results

Lab ID: L2505816-06
Client ID: CAN 4341 SHELF 53
Sample Location:

Date Collected: 02/03/25 18:00
Date Received: 02/04/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 02/04/25 21:09
Analyst: JMB

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2505816
Report Date: 02/26/25

Air Canister Certification Results

Lab ID: L2505816-06
Client ID: CAN 4341 SHELF 53
Sample Location:

Date Collected: 02/03/25 18:00
Date Received: 02/04/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2505816**Project Number:** CANISTER QC BAT**Report Date:** 02/26/25**Air Canister Certification Results**

Lab ID: L2505816-06

Date Collected: 02/03/25 18:00

Client ID: CAN 4341 SHELF 53

Date Received: 02/04/25

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	114		60-140
bromochloromethane	118		60-140
chlorobenzene-d5	115		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2505816
Report Date: 02/26/25

Air Canister Certification Results

Lab ID: L2505816-07
Client ID: CAN 4258 SHELF 54
Sample Location:

Date Collected: 02/03/25 18:00
Date Received: 02/04/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 02/04/25 21:47
Analyst: JMB

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	1.00	--	ND	2.46	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2505816
Report Date: 02/26/25

Air Canister Certification Results

Lab ID: L2505816-07
Client ID: CAN 4258 SHELF 54
Sample Location:

Date Collected: 02/03/25 18:00
Date Received: 02/04/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2505816**Project Number:** CANISTER QC BAT**Report Date:** 02/26/25**Air Canister Certification Results**

Lab ID: L2505816-07

Date Collected: 02/03/25 18:00

Client ID: CAN 4258 SHELF 54

Date Received: 02/04/25

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2505816
Report Date: 02/26/25

Air Canister Certification Results

Lab ID: L2505816-07
Client ID: CAN 4258 SHELF 54
Sample Location:

Date Collected: 02/03/25 18:00
Date Received: 02/04/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	0.996	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2505816**Project Number:** CANISTER QC BAT**Report Date:** 02/26/25**Air Canister Certification Results**

Lab ID: L2505816-07

Date Collected: 02/03/25 18:00

Client ID: CAN 4258 SHELF 54

Date Received: 02/04/25

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	107		60-140
Bromochloromethane	109		60-140
chlorobenzene-d5	108		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2505816
Report Date: 02/26/25

Air Canister Certification Results

Lab ID: L2505816-07
Client ID: CAN 4258 SHELF 54
Sample Location:

Date Collected: 02/03/25 18:00
Date Received: 02/04/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 02/04/25 21:47
Analyst: JMB

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2505816
Report Date: 02/26/25

Air Canister Certification Results

Lab ID: L2505816-07
Client ID: CAN 4258 SHELF 54
Sample Location:

Date Collected: 02/03/25 18:00
Date Received: 02/04/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2505816**Project Number:** CANISTER QC BAT**Report Date:** 02/26/25**Air Canister Certification Results**

Lab ID: L2505816-07

Date Collected: 02/03/25 18:00

Client ID: CAN 4258 SHELF 54

Date Received: 02/04/25

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	114		60-140
bromochloromethane	119		60-140
chlorobenzene-d5	116		60-140



Project Name: TUFTS STREET**Lab Number:** L2507880**Project Number:** 045163**Report Date:** 02/26/25**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information**Cooler** **Custody Seal**

NA Present/Intact

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2507880-01A	Canister - 6L (Batch Certified)	NA	NA			Y	Absent		MCP-TO15-SIM(30)
L2507880-02A	Canister - 6L (Batch Certified)	NA	NA			Y	Absent		MCP-TO15-SIM(30)
L2507880-03A	Canister - 6L (Batch Certified)	NA	NA			Y	Absent		MCP-TO15-SIM(30)
L2507880-04A	Canister - 6L (Batch Certified)	NA	NA			Y	Absent		MCP-TO15-SIM(30)
L2507880-05A	Canister - 2.7L (Batch Certified)	NA	NA			Y	Absent		MCP-TO15-SIM(30)

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2507880
Report Date: 02/26/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report



Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2507880
Report Date: 02/26/25

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

Report Format: Data Usability Report



Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2507880
Report Date: 02/26/25

Data Qualifiers

- ND** - Not detected at the reporting limit (RL) for the sample.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2507880
Report Date: 02/26/25

REFERENCES

- 101 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air (EPA/625/R-96/010b:January 1999) with QC Requirements & Performance Standards for the Analysis of TO-15 under the Massachusetts Contingency Plan, WSC-CAM-IXB, July 2010.

LIMITATION OF LIABILITIES

Pace Analytical Services performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Pace Analytical Services shall be to re-perform the work at it's own expense. In no event shall Pace Analytical Services be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Pace Analytical Services.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Pace Analytical Services LLCFacility: **Northeast**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

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Published Date: 01/24/2025

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Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**EPA 624.1:** m/p-xylene, o-xylene, Naphthalene**EPA 625.1:** alpha-Terpineol**EPA 8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****SM 2540D:** TSS.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

MADEP-APH.**Nonpotable Water:** EPA RSK-175 Dissolved Gases**Biological Tissue Matrix:** EPA 3050B**Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048****EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048**Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)**

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LCHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables).**Microbiology:** SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.** **EPA 522, EPA 537.1.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1 Hg.****SM2340B**

Pace Analytical Services LLCID No.: **17873**Facility: **Northeast**

Revision 27

Department: **Quality Assurance**

Published Date: 01/24/2025

Title: **Certificate/Approval Program Summary**

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Certification IDs:**Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**

CT PH-0826, IL 200077, IN C-MA-03, KY JY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 3090, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048

ANAB/DoD L2474, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

For a complete listing of analytes and methods, please contact your Project Manager.

Tufts Street IA/SV Analyte List

- Vinyl chloride
- 1,1-Dichloroethene
- trans-1,2-Dichloroethane
- 1,1-Dichloroethane
- cis-1,2-Dichloroethene
- 1,1,1-Trichloroethane
- Trichloroethene
- 1,1,2-Trichloroethane
- Tetrachloroethene
- 1,1,2,2-Tetrachloroethane



ANALYTICAL REPORT

Lab Number:	L2507890
Client:	GEI Consultants 400 Unicorn Park Drive Woburn, MA 01801
ATTN:	Chris Coner
Phone:	(781) 721-4000
Project Name:	TUFTS STREET
Project Number:	045163
Report Date:	02/26/25

The original project report/data package is held by Pace Analytical Services. This report/data package is paginated and should be reproduced only in its entirety. Pace Analytical Services holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: NH ELAP (2249).

120 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.pacelabs.com



Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2507890
Report Date: 02/26/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2507890-01	045163-103WASH-F1	AIR	SOMERVILLE, MA	02/11/25 10:42	02/12/25
L2507890-02	045163-103WASH-B1	AIR	SOMERVILLE, MA	02/11/25 11:09	02/12/25
L2507890-03	045163-103WASH-F2	AIR	SOMERVILLE, MA	02/11/25 11:30	02/12/25
L2507890-04	045163-103WASH-UNIT1	AIR	SOMERVILLE, MA	02/11/25 11:25	02/12/25
L2507890-05	045163-103WASH-SV1	SOIL_VAPOR	SOMERVILLE, MA	02/11/25 13:07	02/12/25
L2507890-06	045163-103WASH-SV2	SOIL_VAPOR	SOMERVILLE, MA	02/11/25 13:05	02/12/25

Project Name: TUFTS STREET

Lab Number: L2507890

Project Number: 045163

Report Date: 02/26/25

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	NO
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES
A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	YES
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	NO
For any questions answered "No", please refer to the case narrative section on the following page(s).		

Please note that sample matrix information is located in the Sample Results section of this report.



Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2507890
Report Date: 02/26/25

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Pace Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Pace's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Pace Project Manager and made arrangements for Pace to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2507890
Report Date: 02/26/25

Case Narrative (continued)

MCP Related Narratives

Canisters were released from the laboratory on February 6, 2025. The canister certification data is provided as an addendum.

MCP Volatile Organics in Air

In reference to questions E b/I:

All samples were analyzed for a subset of the MCP compounds per the Chain of Custody.

Sample Receipt

L2507890-01; the analysis of the sample was cancelled by the client.

L2507890-02: The sample had an RPD for the pre- and post-flow controller calibration check (24% RPD) that was outside of the control limit (20% RPD). The final pressure recorded by the laboratory of the associated canister was -5.5 inches of mercury. No further action was required.

L2507890-06: The sample had an RPD for the pre- and post-flow controller calibration check (31% RPD) that was outside of the control limit (20% RPD). The final pressure recorded by the laboratory of the associated canister was -0.0 inches of mercury. No further action was required.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Christopher J. Anderson

Title: Technical Director/Representative

Date: 02/26/25

QC OUTLIER SUMMARY REPORT

Project Name: TUFTS STREET**Lab Number:** L2507890**Project Number:** 045163**Report Date:** 02/26/25

Method	Client ID (Native ID)	Lab ID	Parameter	QC Type	Recovery/RPD (%)	QC Limits (%)	Associated Samples	Data Quality Assessment
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There are no QC Outliers associated with this report.

AIR

Project Name: TUFTS STREET**Project Number:** 045163**Lab Number:** L2507890**Report Date:** 02/26/25**SAMPLE RESULTS**

Lab ID: L2507890-02
 Client ID: 045163-103WASH-B1
 Sample Location: SOMERVILLE, MA

Date Collected: 02/11/25 11:09
 Date Received: 02/12/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 02/24/25 19:28
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.080	0.020	--	0.542	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	84		60-140
bromochloromethane	86		60-140
chlorobenzene-d5	89		60-140



Project Name: TUFTS STREET**Project Number:** 045163**Lab Number:** L2507890**Report Date:** 02/26/25**SAMPLE RESULTS**

Lab ID: L2507890-03
 Client ID: 045163-103WASH-F2
 Sample Location: SOMERVILLE, MA

Date Collected: 02/11/25 11:30
 Date Received: 02/12/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 02/24/25 20:08
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.046	0.020	--	0.312	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	81		60-140
bromochloromethane	85		60-140
chlorobenzene-d5	88		60-140



Project Name: TUFTS STREET**Project Number:** 045163**Lab Number:** L2507890**Report Date:** 02/26/25**SAMPLE RESULTS**

Lab ID: L2507890-04
 Client ID: 045163-103WASH-UNIT1
 Sample Location: SOMERVILLE, MA

Date Collected: 02/11/25 11:25
 Date Received: 02/12/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 02/24/25 20:48
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.025	0.020	--	0.170	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	84		60-140
bromochloromethane	85		60-140
chlorobenzene-d5	91		60-140



Project Name: TUFTS STREET**Project Number:** 045163**Lab Number:** L2507890**Report Date:** 02/26/25**SAMPLE RESULTS**

Lab ID: L2507890-05
 Client ID: 045163-103WASH-SV1
 Sample Location: SOMERVILLE, MA

Date Collected: 02/11/25 13:07
 Date Received: 02/12/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil_Vapor
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 02/26/25 05:38
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	0.049	0.020	--	0.194	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	0.036	0.020	--	0.193	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.201	0.020	--	1.36	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	86		60-140
bromochloromethane	92		60-140
chlorobenzene-d5	91		60-140



Project Name: TUFTS STREET**Project Number:** 045163**Lab Number:** L2507890**Report Date:** 02/26/25**SAMPLE RESULTS**

Lab ID: L2507890-06
 Client ID: 045163-103WASH-SV2
 Sample Location: SOMERVILLE, MA

Date Collected: 02/11/25 13:05
 Date Received: 02/12/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil_Vapor
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 02/26/25 06:15
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	0.489	0.020	--	1.94	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	3.50	0.020	--	13.9	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	4.98	0.020	--	26.8	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	4.98	0.020	--	33.8	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	88		60-140
bromochloromethane	93		60-140
chlorobenzene-d5	94		60-140



Project Name: TUFTS STREET

Lab Number: L2507890

Project Number: 045163

Report Date: 02/26/25

Method Blank Analysis Batch Quality Control

Analytical Method: 101,TO-15-SIM

Analytical Date: 02/24/25 13:55

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 02-04 Batch: WG2033510-4								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1



Project Name: TUFTS STREET

Lab Number: L2507890

Project Number: 045163

Report Date: 02/26/25

Method Blank Analysis Batch Quality Control

Analytical Method: 101,TO-15-SIM

Analytical Date: 02/25/25 16:13

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 05-06 Batch: WG2034026-4								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1



Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2507890

Report Date: 02/26/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 02-04 Batch: WG2033510-3								
Vinyl chloride	130		-		70-130	-		
1,1-Dichloroethene	96		-		70-130	-		
trans-1,2-Dichloroethene	104		-		70-130	-		
1,1-Dichloroethane	96		-		70-130	-		
cis-1,2-Dichloroethene	94		-		70-130	-		
1,1,1-Trichloroethane	100		-		70-130	-		
Trichloroethene	96		-		70-130	-		
1,1,2-Trichloroethane	89		-		70-130	-		
Tetrachloroethene	101		-		70-130	-		
1,1,2,2-Tetrachloroethane	102		-		70-130	-		

Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2507890

Report Date: 02/26/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 05-06 Batch: WG2034026-3								
Vinyl chloride	105		-		70-130	-		
1,1-Dichloroethene	127		-		70-130	-		
trans-1,2-Dichloroethene	120		-		70-130	-		
1,1-Dichloroethane	123		-		70-130	-		
cis-1,2-Dichloroethene	122		-		70-130	-		
1,1,1-Trichloroethane	115		-		70-130	-		
Trichloroethene	114		-		70-130	-		
1,1,2-Trichloroethane	114		-		70-130	-		
Tetrachloroethene	108		-		70-130	-		
1,1,2,2-Tetrachloroethane	124		-		70-130	-		

Project Name: TUFTS STREET

Serial_No: 02262516:31
Lab Number: L2507890

Project Number: 045163

Report Date: 02/26/25

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt	Flow Controller Leak Chk	Flow Out mL/min	Flow In	% RPD
L2507890-01	045163-103WASH-F1	02148	Flow 5	02/06/25	504387		-	-	-	Pass	3.0	7.7	88
L2507890-01	045163-103WASH-F1	5405	6.0L Can	02/06/25	504387	L2505816-07	Pass	-30.2	1.9	-	-	-	-
L2507890-02	045163-103WASH-B1	01423	Flow 5	02/06/25	504387		-	-	-	Pass	3.0	3.8	24
L2507890-02	045163-103WASH-B1	5407	6.0L Can	02/06/25	504387	L2505816-07	Pass	-30.0	-5.5	-	-	-	-
L2507890-03	045163-103WASH-F2	0842	Flow 5	02/06/25	504387		-	-	-	Pass	3.0	3.4	13
L2507890-03	045163-103WASH-F2	2818	6.0L Can	02/06/25	504387	L2505816-07	Pass	-30.2	-8.8	-	-	-	-
L2507890-04	045163-103WASH-UNIT1	02794	Flow 5	02/06/25	504387		-	-	-	Pass	3.0	3.4	13
L2507890-04	045163-103WASH-UNIT1	1553	6.0L Can	02/06/25	504387	L2505816-08	Pass	-30.2	-8.2	-	-	-	-
L2507890-05	045163-103WASH-SV1	01032	Flow 1	02/06/25	504387		-	-	-	Pass	36.0	42.1	16
L2507890-05	045163-103WASH-SV1	4364	2.7L Can	02/06/25	504387	L2505095-02	Pass	-30.2	0.0	-	-	-	-
L2507890-06	045163-103WASH-SV2	01584	Flow 1	02/06/25	504387		-	-	-	Pass	36.0	49.0	31
L2507890-06	045163-103WASH-SV2	2794	2.7L Can	02/06/25	504387	L2505616-02	Pass	-30.2	0.0	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2505095
Report Date: 02/26/25

Air Canister Certification Results

Lab ID: L2505095-02
Client ID: CAN 528 SHELF 74
Sample Location:

Date Collected: 01/29/25 18:00
Date Received: 01/30/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 01/30/25 20:03
Analyst: JFI

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	1.00	--	ND	2.46	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2505095
Report Date: 02/26/25

Air Canister Certification Results

Lab ID: L2505095-02
Client ID: CAN 528 SHELF 74
Sample Location:

Date Collected: 01/29/25 18:00
Date Received: 01/30/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2505095
Report Date: 02/26/25

Air Canister Certification Results

Lab ID: L2505095-02
Client ID: CAN 528 SHELF 74
Sample Location:

Date Collected: 01/29/25 18:00
Date Received: 01/30/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2505095
Report Date: 02/26/25

Air Canister Certification Results

Lab ID: L2505095-02
Client ID: CAN 528 SHELF 74
Sample Location:

Date Collected: 01/29/25 18:00
Date Received: 01/30/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	0.996	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2505095
Report Date: 02/26/25

Air Canister Certification Results

Lab ID: L2505095-02
 Client ID: CAN 528 SHELF 74
 Sample Location:

Date Collected: 01/29/25 18:00
 Date Received: 01/30/25
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				
No Tentatively Identified Compounds				

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	104		60-140
Bromochloromethane	106		60-140
chlorobenzene-d5	103		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2505095
Report Date: 02/26/25

Air Canister Certification Results

Lab ID: L2505095-02
Client ID: CAN 528 SHELF 74
Sample Location:

Date Collected: 01/29/25 18:00
Date Received: 01/30/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 01/30/25 20:03
Analyst: JFI

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2505095
Report Date: 02/26/25

Air Canister Certification Results

Lab ID: L2505095-02
Client ID: CAN 528 SHELF 74
Sample Location:

Date Collected: 01/29/25 18:00
Date Received: 01/30/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2505095**Project Number:** CANISTER QC BAT**Report Date:** 02/26/25**Air Canister Certification Results**

Lab ID: L2505095-02

Date Collected: 01/29/25 18:00

Client ID: CAN 528 SHELF 74

Date Received: 01/30/25

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	114		60-140
bromochloromethane	115		60-140
chlorobenzene-d5	107		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2505616
Report Date: 02/26/25

Air Canister Certification Results

Lab ID: L2505616-02
Client ID: CAN 3184 SHELF 16
Sample Location:

Date Collected: 02/01/25 07:00
Date Received: 02/01/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 02/02/25 19:25
Analyst: JFI

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	1.00	--	ND	2.46	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2505616
Report Date: 02/26/25

Air Canister Certification Results

Lab ID: L2505616-02
Client ID: CAN 3184 SHELF 16
Sample Location:

Date Collected: 02/01/25 07:00
Date Received: 02/01/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2505616
Report Date: 02/26/25

Air Canister Certification Results

Lab ID: L2505616-02
Client ID: CAN 3184 SHELF 16
Sample Location:

Date Collected: 02/01/25 07:00
Date Received: 02/01/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2505616**Project Number:** CANISTER QC BAT**Report Date:** 02/26/25**Air Canister Certification Results**

Lab ID: L2505616-02

Date Collected: 02/01/25 07:00

Client ID: CAN 3184 SHELF 16

Date Received: 02/01/25

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	0.996	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2505616**Project Number:** CANISTER QC BAT**Report Date:** 02/26/25**Air Canister Certification Results**

Lab ID: L2505616-02

Date Collected: 02/01/25 07:00

Client ID: CAN 3184 SHELF 16

Date Received: 02/01/25

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				
No Tentatively Identified Compounds				

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	105		60-140
Bromochloromethane	109		60-140
chlorobenzene-d5	108		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2505616
Report Date: 02/26/25

Air Canister Certification Results

Lab ID: L2505616-02
Client ID: CAN 3184 SHELF 16
Sample Location:

Date Collected: 02/01/25 07:00
Date Received: 02/01/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 02/02/25 19:25
Analyst: JFI

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2505616
Report Date: 02/26/25

Air Canister Certification Results

Lab ID: L2505616-02
Client ID: CAN 3184 SHELF 16
Sample Location:

Date Collected: 02/01/25 07:00
Date Received: 02/01/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2505616**Project Number:** CANISTER QC BAT**Report Date:** 02/26/25**Air Canister Certification Results**

Lab ID: L2505616-02

Date Collected: 02/01/25 07:00

Client ID: CAN 3184 SHELF 16

Date Received: 02/01/25

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	109		60-140
bromochloromethane	114		60-140
chlorobenzene-d5	111		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2505816
Report Date: 02/26/25

Air Canister Certification Results

Lab ID: L2505816-07
Client ID: CAN 4258 SHELF 54
Sample Location:

Date Collected: 02/03/25 18:00
Date Received: 02/04/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 02/04/25 21:47
Analyst: JMB

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	1.00	--	ND	2.46	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2505816
Report Date: 02/26/25

Air Canister Certification Results

Lab ID: L2505816-07
Client ID: CAN 4258 SHELF 54
Sample Location:

Date Collected: 02/03/25 18:00
Date Received: 02/04/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2505816
Report Date: 02/26/25

Air Canister Certification Results

Lab ID: L2505816-07
Client ID: CAN 4258 SHELF 54
Sample Location:

Date Collected: 02/03/25 18:00
Date Received: 02/04/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2505816
Report Date: 02/26/25

Air Canister Certification Results

Lab ID: L2505816-07
Client ID: CAN 4258 SHELF 54
Sample Location:

Date Collected: 02/03/25 18:00
Date Received: 02/04/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	0.996	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2505816**Project Number:** CANISTER QC BAT**Report Date:** 02/26/25**Air Canister Certification Results**

Lab ID: L2505816-07

Date Collected: 02/03/25 18:00

Client ID: CAN 4258 SHELF 54

Date Received: 02/04/25

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	107		60-140
Bromochloromethane	109		60-140
chlorobenzene-d5	108		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2505816
Report Date: 02/26/25

Air Canister Certification Results

Lab ID: L2505816-07
Client ID: CAN 4258 SHELF 54
Sample Location:

Date Collected: 02/03/25 18:00
Date Received: 02/04/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 02/04/25 21:47
Analyst: JMB

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2505816
Report Date: 02/26/25

Air Canister Certification Results

Lab ID: L2505816-07
Client ID: CAN 4258 SHELF 54
Sample Location:

Date Collected: 02/03/25 18:00
Date Received: 02/04/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2505816**Project Number:** CANISTER QC BAT**Report Date:** 02/26/25**Air Canister Certification Results**

Lab ID: L2505816-07

Date Collected: 02/03/25 18:00

Client ID: CAN 4258 SHELF 54

Date Received: 02/04/25

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	114		60-140
bromochloromethane	119		60-140
chlorobenzene-d5	116		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2505816
Report Date: 02/26/25

Air Canister Certification Results

Lab ID: L2505816-08
Client ID: CAN 3070 SHELF 41
Sample Location:

Date Collected: 02/04/25 11:00
Date Received: 02/04/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 02/04/25 22:25
Analyst: JMB

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	1.00	--	ND	2.46	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2505816
Report Date: 02/26/25

Air Canister Certification Results

Lab ID: L2505816-08
Client ID: CAN 3070 SHELF 41
Sample Location:

Date Collected: 02/04/25 11:00
Date Received: 02/04/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2505816
Report Date: 02/26/25

Air Canister Certification Results

Lab ID: L2505816-08
Client ID: CAN 3070 SHELF 41
Sample Location:

Date Collected: 02/04/25 11:00
Date Received: 02/04/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2505816**Project Number:** CANISTER QC BAT**Report Date:** 02/26/25**Air Canister Certification Results**

Lab ID: L2505816-08

Date Collected: 02/04/25 11:00

Client ID: CAN 3070 SHELF 41

Date Received: 02/04/25

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	0.996	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2505816**Project Number:** CANISTER QC BAT**Report Date:** 02/26/25**Air Canister Certification Results**

Lab ID: L2505816-08

Date Collected: 02/04/25 11:00

Client ID: CAN 3070 SHELF 41

Date Received: 02/04/25

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	107		60-140
Bromochloromethane	110		60-140
chlorobenzene-d5	108		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2505816
Report Date: 02/26/25

Air Canister Certification Results

Lab ID: L2505816-08
Client ID: CAN 3070 SHELF 41
Sample Location:

Date Collected: 02/04/25 11:00
Date Received: 02/04/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 02/04/25 22:25
Analyst: JMB

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2505816
Report Date: 02/26/25

Air Canister Certification Results

Lab ID: L2505816-08
Client ID: CAN 3070 SHELF 41
Sample Location:

Date Collected: 02/04/25 11:00
Date Received: 02/04/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2505816**Project Number:** CANISTER QC BAT**Report Date:** 02/26/25**Air Canister Certification Results**

Lab ID: L2505816-08

Date Collected: 02/04/25 11:00

Client ID: CAN 3070 SHELF 41

Date Received: 02/04/25

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	116		60-140
bromochloromethane	119		60-140
chlorobenzene-d5	116		60-140



Project Name: TUFTS STREET**Lab Number:** L2507890**Project Number:** 045163**Report Date:** 02/26/25**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information**Cooler** **Custody Seal**

NA Present/Intact

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2507890-01A	Canister - 6L (Batch Certified)	NA	NA			Y	Present/Intact		CANCELLED(),CLEAN-FEE()
L2507890-02A	Canister - 6L (Batch Certified)	NA	NA			Y	Present/Intact		MCP-TO15-SIM(30)
L2507890-03A	Canister - 6L (Batch Certified)	NA	NA			Y	Present/Intact		MCP-TO15-SIM(30)
L2507890-04A	Canister - 6L (Batch Certified)	NA	NA			Y	Present/Intact		MCP-TO15-SIM(30)
L2507890-05A	Canister - 2.7L (Batch Certified)	NA	NA			Y	Present/Intact		MCP-TO15-SIM(30)
L2507890-06A	Canister - 2.7L (Batch Certified)	NA	NA			Y	Present/Intact		MCP-TO15-SIM(30)

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2507890
Report Date: 02/26/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report



Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2507890
Report Date: 02/26/25

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

Report Format: Data Usability Report



Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2507890
Report Date: 02/26/25

Data Qualifiers

- ND** - Not detected at the reporting limit (RL) for the sample.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2507890
Report Date: 02/26/25

REFERENCES

- 101 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air (EPA/625/R-96/010b:January 1999) with QC Requirements & Performance Standards for the Analysis of TO-15 under the Massachusetts Contingency Plan, WSC-CAM-IXB, July 2010.

LIMITATION OF LIABILITIES

Pace Analytical Services performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Pace Analytical Services shall be to re-perform the work at it's own expense. In no event shall Pace Analytical Services be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Pace Analytical Services.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Pace Analytical Services LLCFacility: **Northeast**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

Revision 27

Published Date: 01/24/2025

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Certification Information**The following analytes are not included in our Primary NELAP Scope of Accreditation:****Westborough Facility – 8 Walkup Dr. Westborough, MA 01581****EPA 624.1:** m/p-xylene, o-xylene, Naphthalene**EPA 625.1:** alpha-Terpineol**EPA 8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****SM 2540D:** TSS.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

MADEP-APH.**Nonpotable Water:** EPA RSK-175 Dissolved Gases**Biological Tissue Matrix:** EPA 3050B**Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048****EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Nonpotable Water: EPA RSK-175 Dissolved Gases**The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:****Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)****The following analytes are included in our Massachusetts DEP Scope of Accreditation****Westborough Facility – 8 Walkup Dr. Westborough, MA 01581****Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables).**Microbiology:** SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg. EPA 522, EPA 537.1.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1 Hg.****SM2340B**

Pace Analytical Services LLCID No.: **17873**Facility: **Northeast**

Revision 27

Department: **Quality Assurance**

Published Date: 01/24/2025

Title: **Certificate/Approval Program Summary**

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Certification IDs:**Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**

CT PH-0826, IL 200077, IN C-MA-03, KY JY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 3090, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048

ANAB/DoD L2474, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

For a complete listing of analytes and methods, please contact your Project Manager.

CHAIN OF CUSTODY

Lead / Nto 2/13/25
0140

Tufts Street IA/SV Analyte List

- Vinyl chloride
- 1,1-Dichloroethene
- trans-1,2-Dichloroethane
- 1,1-Dichloroethane
- cis-1,2-Dichloroethene
- 1,1,1-Trichloroethane
- Trichloroethene
- 1,1,2-Trichloroethane
- Tetrachloroethene
- 1,1,2,2-Tetrachloroethane



ANALYTICAL REPORT

Lab Number:	L2509884
Client:	GEI Consultants 400 Unicorn Park Drive Woburn, MA 01801
ATTN:	Chris Coner
Phone:	(781) 721-4000
Project Name:	TUFTS ST
Project Number:	045163
Report Date:	03/11/25

The original project report/data package is held by Pace Analytical Services. This report/data package is paginated and should be reproduced only in its entirety. Pace Analytical Services holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: NH ELAP (2249).

120 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.pacelabs.com



Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2509884**Report Date:** 03/11/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2509884-01	045163-166GLEN-F1	AIR	SOMERVILLE, MA	02/21/25 09:02	02/21/25
L2509884-02	045163-166GLEN-B1	AIR	SOMERVILLE, MA	02/21/25 09:04	02/21/25

Project Name: TUFTS ST

Lab Number: L2509884

Project Number: 045163

Report Date: 03/11/25

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	NO
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES
A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	YES
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	NO
For any questions answered "No", please refer to the case narrative section on the following page(s).		

Please note that sample matrix information is located in the Sample Results section of this report.



Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2509884
Report Date: 03/11/25

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Pace Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Pace's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Pace Project Manager and made arrangements for Pace to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2509884
Report Date: 03/11/25

Case Narrative (continued)

MCP Related Narratives

Canisters were released from the laboratory on February 13, 2025. The canister certification data is provided as an addendum.

MCP Volatile Organics in Air

In reference to questions E b/I:

All samples were analyzed for a subset of the MCP compounds per the Chain of Custody.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Christopher J. Anderson

Title: Technical Director/Representative

Date: 03/11/25

QC OUTLIER SUMMARY REPORT

Project Name: TUFTS ST**Lab Number:** L2509884**Project Number:** 045163**Report Date:** 03/11/25

Method	Client ID (Native ID)	Lab ID	Parameter	QC Type	Recovery/RPD (%)	QC Limits (%)	Associated Samples	Data Quality Assessment
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There are no QC Outliers associated with this report.

AIR

Project Name: TUFTS ST**Lab Number:** L2509884**Project Number:** 045163**Report Date:** 03/11/25**SAMPLE RESULTS**

Lab ID: L2509884-01
 Client ID: 045163-166GLEN-F1
 Sample Location: SOMERVILLE, MA

Date Collected: 02/21/25 09:02
 Date Received: 02/21/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/09/25 18:04
 Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.165	0.020	--	1.12	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	87		60-140
bromochloromethane	91		60-140
chlorobenzene-d5	88		60-140



Project Name: TUFTS ST**Lab Number:** L2509884**Project Number:** 045163**Report Date:** 03/11/25**SAMPLE RESULTS**

Lab ID: L2509884-02
 Client ID: 045163-166GLEN-B1
 Sample Location: SOMERVILLE, MA

Date Collected: 02/21/25 09:04
 Date Received: 02/21/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/09/25 18:42
 Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	0.058	0.020	--	0.230	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.060	0.020	--	0.407	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	93		60-140
bromochloromethane	96		60-140
chlorobenzene-d5	98		60-140



Project Name: TUFTS ST

Lab Number: L2509884

Project Number: 045163

Report Date: 03/11/25

Method Blank Analysis Batch Quality Control

Analytical Method: 101,TO-15-SIM

Analytical Date: 03/09/25 17:27

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab for sample(s): 01-02 Batch: WG2038336-4								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1



Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS ST

Project Number: 045163

Lab Number: L2509884

Report Date: 03/11/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics in Air by SIM - Mansfield Air Lab Associated sample(s): 01-02 Batch: WG2038336-3								
Vinyl chloride	93		-		70-130	-		
1,1-Dichloroethene	86		-		70-130	-		
trans-1,2-Dichloroethene	108		-		70-130	-		
1,1-Dichloroethane	104		-		70-130	-		
cis-1,2-Dichloroethene	102		-		70-130	-		
1,1,1-Trichloroethane	101		-		70-130	-		
Trichloroethene	105		-		70-130	-		
1,1,2-Trichloroethane	106		-		70-130	-		
Tetrachloroethene	98		-		70-130	-		
1,1,2,2-Tetrachloroethane	104		-		70-130	-		

Project Name: TUFTS ST

Project Number: 045163

Serial_No:03112516:00
Lab Number: L2509884

Report Date: 03/11/25

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt	Flow Controller Leak Chk	Flow Out mL/min	Flow In	% RPD
L2509884-01	045163-166GLEN-F1	01929	Flow 5	02/13/25	505312		-	-	-	Pass	3.0	3.4	13
L2509884-01	045163-166GLEN-F1	4918	6.0L Can	02/13/25	505312	L2507313-08	Pass	-29.7	-9.1	-	-	-	-
L2509884-02	045163-166GLEN-B1	0226	Flow 5	02/13/25	505312		-	-	-	Pass	3.0	3.5	15
L2509884-02	045163-166GLEN-B1	2813	6.0L Can	02/13/25	505312	L2507313-08	Pass	-29.6	-5.3	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507313
Report Date: 03/11/25

Air Canister Certification Results

Lab ID: L2507313-08
Client ID: CAN 2465 SHELF 43
Sample Location:

Date Collected: 02/11/25 10:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 02/12/25 01:30
Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	1.00	--	ND	2.46	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507313
Report Date: 03/11/25

Air Canister Certification Results

Lab ID: L2507313-08
Client ID: CAN 2465 SHELF 43
Sample Location:

Date Collected: 02/11/25 10:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507313
Report Date: 03/11/25

Air Canister Certification Results

Lab ID: L2507313-08
Client ID: CAN 2465 SHELF 43
Sample Location:

Date Collected: 02/11/25 10:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507313
Report Date: 03/11/25

Air Canister Certification Results

Lab ID: L2507313-08
Client ID: CAN 2465 SHELF 43
Sample Location:

Date Collected: 02/11/25 10:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	0.996	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2507313**Project Number:** CANISTER QC BAT**Report Date:** 03/11/25**Air Canister Certification Results**

Lab ID: L2507313-08

Date Collected: 02/11/25 10:00

Client ID: CAN 2465 SHELF 43

Date Received: 02/11/25

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	89		60-140
Bromochloromethane	96		60-140
chlorobenzene-d5	92		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507313
Report Date: 03/11/25

Air Canister Certification Results

Lab ID: L2507313-08
Client ID: CAN 2465 SHELF 43
Sample Location:

Date Collected: 02/11/25 10:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 02/12/25 01:30
Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507313
Report Date: 03/11/25

Air Canister Certification Results

Lab ID: L2507313-08
Client ID: CAN 2465 SHELF 43
Sample Location:

Date Collected: 02/11/25 10:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2507313**Project Number:** CANISTER QC BAT**Report Date:** 03/11/25**Air Canister Certification Results**

Lab ID: L2507313-08

Date Collected: 02/11/25 10:00

Client ID: CAN 2465 SHELF 43

Date Received: 02/11/25

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	89		60-140
bromochloromethane	97		60-140
chlorobenzene-d5	93		60-140



Project Name: TUFTS ST
Project Number: 045163

Serial_No:03112516:00
Lab Number: L2509884
Report Date: 03/11/25

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
NA	Present/Intact

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2509884-01A	Canister - 6L (Batch Certified)	NA	NA			Y	Absent		MCP-TO15-SIM(30)
L2509884-02A	Canister - 6L (Batch Certified)	NA	NA			Y	Absent		MCP-TO15-SIM(30)

Project Name: TUFTS ST**Lab Number:** L2509884**Project Number:** 045163**Report Date:** 03/11/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report

Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2509884
Report Date: 03/11/25

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

Report Format: Data Usability Report



Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2509884
Report Date: 03/11/25

Data Qualifiers

- ND** - Not detected at the reporting limit (RL) for the sample.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: TUFTS ST**Lab Number:** L2509884**Project Number:** 045163**Report Date:** 03/11/25

REFERENCES

- 101 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air (EPA/625/R-96/010b:January 1999) with QC Requirements & Performance Standards for the Analysis of TO-15 under the Massachusetts Contingency Plan, WSC-CAM-IXB, July 2010.

LIMITATION OF LIABILITIES

Pace Analytical Services performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Pace Analytical Services shall be to re-perform the work at it's own expense. In no event shall Pace Analytical Services be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Pace Analytical Services.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Pace Analytical Services LLCFacility: **Northeast**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

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Published Date: 01/24/2025

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Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**EPA 624.1:** m/p-xylene, o-xylene, Naphthalene**EPA 625.1:** alpha-Terpineol**EPA 8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****SM 2540D:** TSS.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

MADEP-APH.**Nonpotable Water:** EPA RSK-175 Dissolved Gases**Biological Tissue Matrix:** EPA 3050B**Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048****EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048**Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)**

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LCHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables).**Microbiology:** SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.** **EPA 522, EPA 537.1.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1 Hg.****SM2340B**

Pace Analytical Services LLCID No.:**17873**Facility: **Northeast**

Revision 27

Department: **Quality Assurance**

Published Date: 01/24/2025

Title: **Certificate/Approval Program Summary**

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Certification IDs:**Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**

CT PH-0826, IL 200077, IN C-MA-03, KY JY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 3090, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048

ANAB/DoD L2474, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

For a complete listing of analytes and methods, please contact your Project Manager.

2/21/25

L2509884

TEL: 508-822-9300 FAX: 508-822-3288 Client Information Client: GEI Consultants, Inc Address: 400 Unicorn Park Drive, Woburn MA 01801 Phone: 781-721-4000 Fax: Email: labdata@geiconsultants.com ☐ These samples have been previously analyzed by Alpha Other Project Specific Requirements/Comments: Project-Specific Target Compound List: ☒		Project Information Project Name: Tufts St Project Location: Somerville, MA Project #: 045163 Project Manager: Chris Connor ALPHA Quote #: Turn-Around Time ☒ Standard ☐ RUSH (only confirmed if pre-approved) Date Due: Time:		Report Information - Data Deliverables ☐ FAX ☐ ADEX Criteria Checker: (Default based on Regulatory Criteria Indicated) Other Formats: ☒ EMAIL (standard pdf report) ☐ Additional Deliverables: Report ID: (if different than Project Manager)		Billing Information ☒ Same as Client info PO #: Regulatory Requirements/Report Limits State/Fed Program Res / Comm												
All Columns Below Must Be Filled Out																		
ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION						Sample Matrix*	Sampler's Initials	Can Size	ID Can	ID - Flow Controller	ANALYSIS					Sample Comments (i.e. PID)
		End Date	Start Time	End Time	Initial Vacuum	Final Vacuum	TO-15						TO-15 SIM	APH	Fixed Gases	Surfactants & Surfactants by TO-15		
09884-01	045163-166 Glen-F1	2/21/25	0902	0902	-30.85	-9.35	1A	JWG	6L	4918	01929	X					See attached list of analyses	
02	045163-166 Glen-B1		0906	0904	-30.56	-5.69	1A	JWG	6L	2813	0226	X						
	045163-103 Wash-F1		1032	1015	-30.45	-6.73	1A	JWG	6L	3993	01381	X						
	JWG 2/21/25																	
*SAMPLE MATRIX CODES		AA = Ambient Air (Indoor/Outdoor) SV = Soil Vapor/Landfill Gas/SVE Other = Please Specify						Container Type		Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.								
1/1		Relinquished By:		Date/Time		Received By:		Date/Time										
		William J. Hoff		2/21/25 1105		GEI Field Room		2/21/25 1105										
		/ GEI Field Room		2/21/25 1251		William J. Hoff		2/21/25 1251										
		William J. Hoff		2/21/25 1252		Bran Bran Inc		2-21-25 1255										
						Rec'd Lul J Hoff		2/21/25 2100										

Indoor Air Sampling Analyte List

- 1,1-Dichloroethane
- 1,1-Dichloroethylene
- trans-1,2-Dichloroethylene
- cis-1,2-Dichloroethylene
- 1,1,1-Trichloroethane
- 1,1,2,2-Tetrachloroethane
- 1,1,2-Trichloroethane
- Tetrachloroethylene
- Trichloroethylene
- Vinyl Chloride



ANALYTICAL REPORT

Lab Number:	L2509911
Client:	GEI Consultants 400 Unicorn Park Drive Woburn, MA 01801
ATTN:	Chris Coner
Phone:	(781) 721-4000
Project Name:	TUFTS ST
Project Number:	045163
Report Date:	03/10/25

The original project report/data package is held by Pace Analytical Services. This report/data package is paginated and should be reproduced only in its entirety. Pace Analytical Services holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: NH ELAP (2249).

120 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.pacelabs.com



Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2509911**Report Date:** 03/10/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2509911-01	045163-103WASH-F1	AIR	SOMERVILLE, MA	02/21/25 10:15	02/21/25

Project Name: TUFTS ST

Lab Number: L2509911

Project Number: 045163

Report Date: 03/10/25

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	NO
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES
A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	YES
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	NO
For any questions answered "No", please refer to the case narrative section on the following page(s).		

Please note that sample matrix information is located in the Sample Results section of this report.



Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2509911
Report Date: 03/10/25

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Pace Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Pace's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Pace Project Manager and made arrangements for Pace to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2509911
Report Date: 03/10/25

Case Narrative (continued)

MCP Related Narratives

Canisters were released from the laboratory on February 13, 2025. The canister certification data is provided as an addendum.

MCP Volatile Organics in Air

In reference to questions E b/I:

All samples were analyzed for a subset of the MCP compounds per the Chain of Custody.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Christopher J. Anderson

Title: Technical Director/Representative

Date: 03/10/25

QC OUTLIER SUMMARY REPORT

Project Name: TUFTS ST**Lab Number:** L2509911**Project Number:** 045163**Report Date:** 03/10/25

Method	Client ID (Native ID)	Lab ID	Parameter	QC Type	Recovery/RPD (%)	QC Limits (%)	Associated Samples	Data Quality Assessment
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There are no QC Outliers associated with this report.

AIR

Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2509911**Report Date:** 03/10/25**SAMPLE RESULTS**

Lab ID: L2509911-01
 Client ID: 045163-103WASH-F1
 Sample Location: SOMERVILLE, MA

Date Collected: 02/21/25 10:15
 Date Received: 02/21/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/04/25 07:40
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	87		60-140
bromochloromethane	91		60-140
chlorobenzene-d5	89		60-140



Project Name: TUFTS ST

Lab Number: L2509911

Project Number: 045163

Report Date: 03/10/25

Method Blank Analysis Batch Quality Control

Analytical Method: 101,TO-15-SIM

Analytical Date: 03/03/25 18:09

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab for sample(s): 01 Batch: WG2036173-4								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1



Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS ST

Project Number: 045163

Lab Number: L2509911

Report Date: 03/10/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics in Air by SIM - Mansfield Air Lab Associated sample(s): 01 Batch: WG2036173-3								
Vinyl chloride	79		-		70-130	-		
1,1-Dichloroethene	80		-		70-130	-		
trans-1,2-Dichloroethene	83		-		70-130	-		
1,1-Dichloroethane	76		-		70-130	-		
cis-1,2-Dichloroethene	76		-		70-130	-		
1,1,1-Trichloroethane	82		-		70-130	-		
Trichloroethene	86		-		70-130	-		
1,1,2-Trichloroethane	86		-		70-130	-		
Tetrachloroethene	86		-		70-130	-		
1,1,2,2-Tetrachloroethane	93		-		70-130	-		

Project Name: TUFTS ST
Project Number: 045163

Serial_No:03102517:56
Lab Number: L2509911
Report Date: 03/10/25

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt	Flow Controler Leak Chk	Flow Out mL/min	Flow In	% RPD
L2509911-01	045163-103WASH-F1	01381	Flow 5	02/13/25	505312		-	-	-	Pass	3.0	3.1	3
L2509911-01	045163-103WASH-F1	3943	6.0L Can	02/13/25	505312	L2507313-08	Pass	-29.7	-5.5	-	-	-	-



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507313
Report Date: 03/10/25

Air Canister Certification Results

Lab ID: L2507313-08
Client ID: CAN 2465 SHELF 43
Sample Location:

Date Collected: 02/11/25 10:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 02/12/25 01:30
Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	1.00	--	ND	2.46	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507313
Report Date: 03/10/25

Air Canister Certification Results

Lab ID: L2507313-08
Client ID: CAN 2465 SHELF 43
Sample Location:

Date Collected: 02/11/25 10:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507313
Report Date: 03/10/25

Air Canister Certification Results

Lab ID: L2507313-08
Client ID: CAN 2465 SHELF 43
Sample Location:

Date Collected: 02/11/25 10:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507313
Report Date: 03/10/25

Air Canister Certification Results

Lab ID: L2507313-08
Client ID: CAN 2465 SHELF 43
Sample Location:

Date Collected: 02/11/25 10:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	0.996	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507313
Report Date: 03/10/25

Air Canister Certification Results

Lab ID: L2507313-08
 Client ID: CAN 2465 SHELF 43
 Sample Location:

Date Collected: 02/11/25 10:00
 Date Received: 02/11/25
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				
No Tentatively Identified Compounds				

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	89		60-140
Bromochloromethane	96		60-140
chlorobenzene-d5	92		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507313
Report Date: 03/10/25

Air Canister Certification Results

Lab ID: L2507313-08
Client ID: CAN 2465 SHELF 43
Sample Location:

Date Collected: 02/11/25 10:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 02/12/25 01:30
Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507313
Report Date: 03/10/25

Air Canister Certification Results

Lab ID: L2507313-08
Client ID: CAN 2465 SHELF 43
Sample Location:

Date Collected: 02/11/25 10:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2507313**Project Number:** CANISTER QC BAT**Report Date:** 03/10/25**Air Canister Certification Results**

Lab ID: L2507313-08

Date Collected: 02/11/25 10:00

Client ID: CAN 2465 SHELF 43

Date Received: 02/11/25

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	89		60-140
bromochloromethane	97		60-140
chlorobenzene-d5	93		60-140



Project Name: TUFTS ST
Project Number: 045163

Serial_No:03102517:56
Lab Number: L2509911
Report Date: 03/10/25

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
NA	Present/Intact

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2509911-01A	Canister - 6L (Batch Certified)	NA	NA			Y	Absent		MCP-TO15-SIM(30)

Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2509911
Report Date: 03/10/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report



Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2509911
Report Date: 03/10/25

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

Report Format: Data Usability Report



Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2509911
Report Date: 03/10/25

Data Qualifiers

- ND** - Not detected at the reporting limit (RL) for the sample.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: TUFTS ST**Lab Number:** L2509911**Project Number:** 045163**Report Date:** 03/10/25

REFERENCES

- 101 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air (EPA/625/R-96/010b:January 1999) with QC Requirements & Performance Standards for the Analysis of TO-15 under the Massachusetts Contingency Plan, WSC-CAM-IXB, July 2010.

LIMITATION OF LIABILITIES

Pace Analytical Services performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Pace Analytical Services shall be to re-perform the work at it's own expense. In no event shall Pace Analytical Services be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Pace Analytical Services.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Pace Analytical Services LLCFacility: **Northeast**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

Revision 27

Published Date: 01/24/2025

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Certification Information**The following analytes are not included in our Primary NELAP Scope of Accreditation:****Westborough Facility – 8 Walkup Dr. Westborough, MA 01581****EPA 624.1:** m/p-xylene, o-xylene, Naphthalene**EPA 625.1:** alpha-Terpineol**EPA 8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****SM 2540D:** TSS.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

MADEP-APH.**Nonpotable Water:** EPA RSK-175 Dissolved Gases**Biological Tissue Matrix:** EPA 3050B**Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048****EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Nonpotable Water: EPA RSK-175 Dissolved Gases**The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:****Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)****The following analytes are included in our Massachusetts DEP Scope of Accreditation****Westborough Facility – 8 Walkup Dr. Westborough, MA 01581****Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables).**Microbiology:** SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.****EPA 522, EPA 537.1.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1 Hg.****SM2340B**

Pace Analytical Services LLCID No.:**17873**Facility: **Northeast**

Revision 27

Department: **Quality Assurance**

Published Date: 01/24/2025

Title: **Certificate/Approval Program Summary**

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Certification IDs:**Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**

CT PH-0826, IL 200077, IN C-MA-03, KY JY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 3090, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048

ANAB/DoD L2474, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

For a complete listing of analytes and methods, please contact your Project Manager.

CHAIN OF CUSTODY

Client Information

☐ These samples have been previously analyzed by Alpha

Project-Specific Target Compound List: 

PAGE 2 OF 2

ALPHA Job #: L2509911

ALPHA Quote

☐ Standard ☐ RUSH (only confirmed if pre-approved)

Date Due: _____ Time: _____

Report to: (if different than Project Manager)

☒ Same as Client info	PO #:
---	-------

State/Fed	Program	Res / Comm
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To-15
O-15 SIM
APH
Fixed Gases
Surfactants & Mercaptans by To-15

All Columns Below Must Be Filled Out

[illegible]

*SAMPLE MATRIX CODES

Other = Please Specify

Container Type

Relinquished By:

Date/Time

Received By:

Date/Time:

Form No: 101-02 Rev: (25-Sep-16)

Julian Druff
GEI Field Room
June 20

2	21	25	1105
2	21	25	1252
2	21	25	1253

GEI Field Room
Jillia & up
Bm: Rm: E

2/21/25	1105
2/21/25	1257
2-21-25	1255

Rec: Lual / Nth 2/21/25 2100

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Indoor Air Sampling Analyte List

- 1,1-Dichloroethane
- 1,1-Dichloroethylene
- trans-1,2-Dichloroethylene
- cis-1,2-Dichloroethylene
- 1,1,1-Trichloroethane
- 1,1,2,2-Tetrachloroethane
- 1,1,2-Trichloroethane
- Tetrachloroethylene
- Trichloroethylene
- Vinyl Chloride



ANALYTICAL REPORT

Lab Number:	L2509914
Client:	GEI Consultants 400 Unicorn Park Drive Woburn, MA 01801
ATTN:	Chris Coner
Phone:	(781) 721-4000
Project Name:	TUFTS ST
Project Number:	045163
Report Date:	03/10/25

The original project report/data package is held by Pace Analytical Services. This report/data package is paginated and should be reproduced only in its entirety. Pace Analytical Services holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: NH ELAP (2249).

120 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.pacelabs.com



Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2509914**Report Date:** 03/10/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2509914-01	045163-97FRANK-B	AIR	SOMERVILLE	02/19/25 08:18	02/21/25
L2509914-02	045163-97FRANK-1	AIR	SOMERVILLE	02/19/25 08:37	02/21/25
L2509914-03	045163-97FRANK-2	AIR	SOMERVILLE	02/19/25 08:35	02/21/25
L2509914-04	045163-97FRANK-SS1	SOIL_VAPOR	SOMERVILLE	02/19/25 09:38	02/21/25
L2509914-05	045163-97FRANK-SS2	SOIL_VAPOR	SOMERVILLE	02/19/25 09:36	02/21/25

Project Name: TUFTS ST

Lab Number: L2509914

Project Number: 045163

Report Date: 03/10/25

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	NO
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES
A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	YES
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	NO
For any questions answered "No", please refer to the case narrative section on the following page(s).		

Please note that sample matrix information is located in the Sample Results section of this report.



Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2509914
Report Date: 03/10/25

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Pace Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Pace's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Pace Project Manager and made arrangements for Pace to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2509914
Report Date: 03/10/25

Case Narrative (continued)

MCP Related Narratives

Canisters were released from the laboratory on January 15, 2025. The canister certification data is provided as an addendum.

MCP Volatile Organics in Air

In reference to questions E b/I:

All samples were analyzed for a subset of the MCP compounds per the Chain of Custody.

L2509914-04: The sample had an RPD for the pre- and post-flow controller calibration check (26% RPD) that was outside of the control limit (20% RPD). The final pressure recorded by the laboratory of the associated canister was -1.1 inches of mercury. No further action was required.

L2509914-05: The sample had an RPD for the pre- and post-flow controller calibration check (29% RPD) that was outside of the control limit (20% RPD). The final pressure recorded by the laboratory of the associated canister was -1.3 inches of mercury. No further action was required.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Christopher J. Anderson

Title: Technical Director/Representative

Date: 03/10/25

QC OUTLIER SUMMARY REPORT

Project Name: TUFTS ST**Lab Number:** L2509914**Project Number:** 045163**Report Date:** 03/10/25

Method	Client ID (Native ID)	Lab ID	Parameter	QC Type	Recovery/RPD (%)	QC Limits (%)	Associated Samples	Data Quality Assessment
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There are no QC Outliers associated with this report.

AIR

Project Name: TUFTS ST**Lab Number:** L2509914**Project Number:** 045163**Report Date:** 03/10/25**SAMPLE RESULTS**

Lab ID: L2509914-01
 Client ID: 045163-97FRANK-B
 Sample Location: SOMERVILLE

Date Collected: 02/19/25 08:18
 Date Received: 02/21/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/04/25 05:06
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	0.021	0.020	--	0.085	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	0.044	0.020	--	0.240	0.109	--		1
Trichloroethene	0.204	0.020	--	1.10	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.092	0.020	--	0.624	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	83		60-140
bromochloromethane	92		60-140
chlorobenzene-d5	88		60-140



Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2509914**Report Date:** 03/10/25**SAMPLE RESULTS**

Lab ID: L2509914-02
 Client ID: 045163-97FRANK-1
 Sample Location: SOMERVILLE

Date Collected: 02/19/25 08:37
 Date Received: 02/21/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/04/25 05:45
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	0.037	0.020	--	0.199	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.028	0.020	--	0.190	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	81		60-140
bromochloromethane	91		60-140
chlorobenzene-d5	83		60-140



Project Name: TUFTS ST**Lab Number:** L2509914**Project Number:** 045163**Report Date:** 03/10/25**SAMPLE RESULTS**

Lab ID: L2509914-03
 Client ID: 045163-97FRANK-2
 Sample Location: SOMERVILLE

Date Collected: 02/19/25 08:35
 Date Received: 02/21/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/04/25 06:24
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	0.041	0.020	--	0.220	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.026	0.020	--	0.176	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	83		60-140
bromochloromethane	92		60-140
chlorobenzene-d5	83		60-140



Project Name: TUFTS ST**Lab Number:** L2509914**Project Number:** 045163**Report Date:** 03/10/25**SAMPLE RESULTS**

Lab ID: L2509914-04
 Client ID: 045163-97FRANK-SS1
 Sample Location: SOMERVILLE

Date Collected: 02/19/25 09:38
 Date Received: 02/21/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil_Vapor
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/09/25 02:57
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	0.021	0.020	--	0.113	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	3.10	0.020	--	21.0	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	88		60-140
bromochloromethane	94		60-140
chlorobenzene-d5	95		60-140



Project Name: TUFTS ST**Lab Number:** L2509914**Project Number:** 045163**Report Date:** 03/10/25**SAMPLE RESULTS**

Lab ID: L2509914-05
 Client ID: 045163-97FRANK-SS2
 Sample Location: SOMERVILLE

Date Collected: 02/19/25 09:36
 Date Received: 02/21/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil_Vapor
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/09/25 04:13
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	0.050	0.020	--	0.269	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.153	0.020	--	1.04	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	86		60-140
bromochloromethane	92		60-140
chlorobenzene-d5	94		60-140



Project Name: TUFTS ST

Lab Number: L2509914

Project Number: 045163

Report Date: 03/10/25

Method Blank Analysis Batch Quality Control

Analytical Method: 101,TO-15-SIM

Analytical Date: 03/03/25 18:09

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab for sample(s): 01-03 Batch: WG2036173-4								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1



Project Name: TUFTS ST

Lab Number: L2509914

Project Number: 045163

Report Date: 03/10/25

Method Blank Analysis Batch Quality Control

Analytical Method: 101,TO-15-SIM

Analytical Date: 03/08/25 17:17

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab for sample(s): 04-05 Batch: WG2038187-4								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1



Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS ST

Project Number: 045163

Lab Number: L2509914

Report Date: 03/10/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics in Air by SIM - Mansfield Air Lab Associated sample(s): 01-03 Batch: WG2036173-3								
Vinyl chloride	79		-		70-130	-		
1,1-Dichloroethene	80		-		70-130	-		
trans-1,2-Dichloroethene	83		-		70-130	-		
1,1-Dichloroethane	76		-		70-130	-		
cis-1,2-Dichloroethene	76		-		70-130	-		
1,1,1-Trichloroethane	82		-		70-130	-		
Trichloroethene	86		-		70-130	-		
1,1,2-Trichloroethane	86		-		70-130	-		
Tetrachloroethene	86		-		70-130	-		
1,1,2,2-Tetrachloroethane	93		-		70-130	-		

Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS ST

Project Number: 045163

Lab Number: L2509914

Report Date: 03/10/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics in Air by SIM - Mansfield Air Lab Associated sample(s): 04-05 Batch: WG2038187-3								
Vinyl chloride	83		-		70-130	-		
1,1-Dichloroethene	107		-		70-130	-		
trans-1,2-Dichloroethene	98		-		70-130	-		
1,1-Dichloroethane	102		-		70-130	-		
cis-1,2-Dichloroethene	101		-		70-130	-		
1,1,1-Trichloroethane	95		-		70-130	-		
Trichloroethene	94		-		70-130	-		
1,1,2-Trichloroethane	93		-		70-130	-		
Tetrachloroethene	87		-		70-130	-		
1,1,2,2-Tetrachloroethane	104		-		70-130	-		

Lab Duplicate Analysis

Batch Quality Control

Project Name: TUFTS ST

Project Number: 045163

Lab Number: L2509914

Report Date: 03/10/25

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
MCP Volatile Organics in Air by SIM - Mansfield Air Lab Associated sample(s): 04-05 QC Batch ID: WG2038187-5 QC Sample: L2509914-04 Client ID: 045163-97FRANK-SS1						
Vinyl chloride	ND	ND	ppbV	NC		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1-Dichloroethane	ND	ND	ppbV	NC		25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1,1-Trichloroethane	ND	ND	ppbV	NC		25
Trichloroethene	0.021	ND	ppbV	NC		25
1,1,2-Trichloroethane	ND	ND	ppbV	NC		25
Tetrachloroethene	3.10	2.97	ppbV	4		25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC		25

Project Name: TUFTS ST

Serial_No:03102516:52
Lab Number: L2509914

Project Number: 045163

Report Date: 03/10/25

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt	Flow Controller Leak Chk	Flow Out mL/min	Flow In	% RPD
L2509914-01	045163-97FRANK-B	01418	Flow 5	01/15/25	502722		-	-	-	Pass	3.0	3.6	18
L2509914-01	045163-97FRANK-B	3282	6.0L Can	01/15/25	502722	L2501761-08	Pass	-29.6	-3.0	-	-	-	-
L2509914-02	045163-97FRANK-1	01743	Flow 5	01/15/25	502722		-	-	-	Pass	3.0	3.5	15
L2509914-02	045163-97FRANK-1	2098	6.0L Can	01/15/25	502722	L2501761-07	Pass	-29.6	-8.0	-	-	-	-
L2509914-03	045163-97FRANK-2	01419	Flow 5	01/15/25	502722		-	-	-	Pass	3.0	3.4	13
L2509914-03	045163-97FRANK-2	4769	6.0L Can	01/15/25	502722	L2501761-07	Pass	-29.4	-8.7	-	-	-	-
L2509914-04	045163-97FRANK-SS1	0714	Flow 2	01/15/25	502722		-	-	-	Pass	36.0	46.9	26
L2509914-04	045163-97FRANK-SS1	513	2.7L Can	01/15/25	502722	L2501761-06	Pass	-29.4	-1.1	-	-	-	-
L2509914-05	045163-97FRANK-SS2	0559	Flow 2	01/15/25	502722		-	-	-	Pass	35.5	47.7	29
L2509914-05	045163-97FRANK-SS2	4379	2.7L Can	01/15/25	502722	L2501761-06	Pass	-29.5	-1.3	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2501761
Report Date: 03/10/25

Air Canister Certification Results

Lab ID: L2501761-06
Client ID: CAN 141 SHELF 8
Sample Location:

Date Collected: 01/13/25 12:00
Date Received: 01/13/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 01/13/25 21:39
Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	1.00	--	ND	2.46	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2501761
Report Date: 03/10/25

Air Canister Certification Results

Lab ID: L2501761-06
Client ID: CAN 141 SHELF 8
Sample Location:

Date Collected: 01/13/25 12:00
Date Received: 01/13/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2501761
Report Date: 03/10/25

Air Canister Certification Results

Lab ID: L2501761-06
Client ID: CAN 141 SHELF 8
Sample Location:

Date Collected: 01/13/25 12:00
Date Received: 01/13/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2501761
Report Date: 03/10/25

Air Canister Certification Results

Lab ID: L2501761-06
Client ID: CAN 141 SHELF 8
Sample Location:

Date Collected: 01/13/25 12:00
Date Received: 01/13/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	0.996	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2501761
Report Date: 03/10/25

Air Canister Certification Results

Lab ID: L2501761-06
 Client ID: CAN 141 SHELF 8
 Sample Location:

Date Collected: 01/13/25 12:00
 Date Received: 01/13/25
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				
No Tentatively Identified Compounds				

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	93		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	89		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2501761
Report Date: 03/10/25

Air Canister Certification Results

Lab ID: L2501761-06
Client ID: CAN 141 SHELF 8
Sample Location:

Date Collected: 01/13/25 12:00
Date Received: 01/13/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 01/13/25 21:39
Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2501761
Report Date: 03/10/25

Air Canister Certification Results

Lab ID: L2501761-06
Client ID: CAN 141 SHELF 8
Sample Location:

Date Collected: 01/13/25 12:00
Date Received: 01/13/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2501761
Report Date: 03/10/25

Air Canister Certification Results

Lab ID: L2501761-06
Client ID: CAN 141 SHELF 8
Sample Location:

Date Collected: 01/13/25 12:00
Date Received: 01/13/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	88		60-140
bromochloromethane	94		60-140
chlorobenzene-d5	90		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2501761
Report Date: 03/10/25

Air Canister Certification Results

Lab ID: L2501761-07
Client ID: CAN 1667 SHELF 51
Sample Location:

Date Collected: 01/13/25 12:00
Date Received: 01/13/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 01/13/25 22:17
Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	1.00	--	ND	2.46	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2501761
Report Date: 03/10/25

Air Canister Certification Results

Lab ID: L2501761-07
Client ID: CAN 1667 SHELF 51
Sample Location:

Date Collected: 01/13/25 12:00
Date Received: 01/13/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2501761
Report Date: 03/10/25

Air Canister Certification Results

Lab ID: L2501761-07
Client ID: CAN 1667 SHELF 51
Sample Location:

Date Collected: 01/13/25 12:00
Date Received: 01/13/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2501761
Report Date: 03/10/25

Air Canister Certification Results

Lab ID: L2501761-07
Client ID: CAN 1667 SHELF 51
Sample Location:

Date Collected: 01/13/25 12:00
Date Received: 01/13/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	0.996	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2501761
Report Date: 03/10/25

Air Canister Certification Results

Lab ID: L2501761-07
 Client ID: CAN 1667 SHELF 51
 Sample Location:

Date Collected: 01/13/25 12:00
 Date Received: 01/13/25
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				
No Tentatively Identified Compounds				

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	91		60-140
Bromochloromethane	93		60-140
chlorobenzene-d5	90		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2501761
Report Date: 03/10/25

Air Canister Certification Results

Lab ID: L2501761-07
Client ID: CAN 1667 SHELF 51
Sample Location:

Date Collected: 01/13/25 12:00
Date Received: 01/13/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 01/13/25 22:17
Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2501761
Report Date: 03/10/25

Air Canister Certification Results

Lab ID: L2501761-07
Client ID: CAN 1667 SHELF 51
Sample Location:

Date Collected: 01/13/25 12:00
Date Received: 01/13/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2501761**Project Number:** CANISTER QC BAT**Report Date:** 03/10/25**Air Canister Certification Results**

Lab ID: L2501761-07

Date Collected: 01/13/25 12:00

Client ID: CAN 1667 SHELF 51

Date Received: 01/13/25

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	88		60-140
bromochloromethane	93		60-140
chlorobenzene-d5	90		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2501761
Report Date: 03/10/25

Air Canister Certification Results

Lab ID: L2501761-08
Client ID: CAN 1602 SHELF 52
Sample Location:

Date Collected: 01/13/25 12:00
Date Received: 01/13/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 01/13/25 22:56
Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	1.00	--	ND	2.46	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2501761
Report Date: 03/10/25

Air Canister Certification Results

Lab ID: L2501761-08
Client ID: CAN 1602 SHELF 52
Sample Location:

Date Collected: 01/13/25 12:00
Date Received: 01/13/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2501761
Report Date: 03/10/25

Air Canister Certification Results

Lab ID: L2501761-08
Client ID: CAN 1602 SHELF 52
Sample Location:

Date Collected: 01/13/25 12:00
Date Received: 01/13/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2501761**Project Number:** CANISTER QC BAT**Report Date:** 03/10/25**Air Canister Certification Results**

Lab ID: L2501761-08

Date Collected: 01/13/25 12:00

Client ID: CAN 1602 SHELF 52

Date Received: 01/13/25

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	0.996	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2501761**Project Number:** CANISTER QC BAT**Report Date:** 03/10/25**Air Canister Certification Results**

Lab ID: L2501761-08

Date Collected: 01/13/25 12:00

Client ID: CAN 1602 SHELF 52

Date Received: 01/13/25

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				
No Tentatively Identified Compounds				

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	89		60-140
Bromochloromethane	88		60-140
chlorobenzene-d5	85		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2501761
Report Date: 03/10/25

Air Canister Certification Results

Lab ID: L2501761-08
Client ID: CAN 1602 SHELF 52
Sample Location:

Date Collected: 01/13/25 12:00
Date Received: 01/13/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 01/13/25 22:56
Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2501761
Report Date: 03/10/25

Air Canister Certification Results

Lab ID: L2501761-08
Client ID: CAN 1602 SHELF 52
Sample Location:

Date Collected: 01/13/25 12:00
Date Received: 01/13/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2501761
Report Date: 03/10/25

Air Canister Certification Results

Lab ID: L2501761-08
Client ID: CAN 1602 SHELF 52
Sample Location:

Date Collected: 01/13/25 12:00
Date Received: 01/13/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	85		60-140
bromochloromethane	90		60-140
chlorobenzene-d5	87		60-140



Project Name: TUFTS ST
Project Number: 045163

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
NA	Present/Intact

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2509914-01A	Canister - 6L (Batch Certified)	NA	NA			Y	Absent		MCP-TO15-SIM(30)
L2509914-02A	Canister - 6L (Batch Certified)	NA	NA			Y	Absent		MCP-TO15-SIM(30)
L2509914-03A	Canister - 6L (Batch Certified)	NA	NA			Y	Absent		MCP-TO15-SIM(30)
L2509914-04A	Canister - 2.7L (Batch Certified)	NA	NA			Y	Absent		MCP-TO15-SIM(30)
L2509914-05A	Canister - 2.7L (Batch Certified)	NA	NA			Y	Absent		MCP-TO15-SIM(30)

*Values in parentheses indicate holding time in days



Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2509914
Report Date: 03/10/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report



Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2509914
Report Date: 03/10/25

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

Report Format: Data Usability Report



Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2509914
Report Date: 03/10/25

Data Qualifiers

- ND** - Not detected at the reporting limit (RL) for the sample.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: TUFTS ST**Lab Number:** L2509914**Project Number:** 045163**Report Date:** 03/10/25

REFERENCES

- 101 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air (EPA/625/R-96/010b:January 1999) with QC Requirements & Performance Standards for the Analysis of TO-15 under the Massachusetts Contingency Plan, WSC-CAM-IXB, July 2010.

LIMITATION OF LIABILITIES

Pace Analytical Services performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Pace Analytical Services shall be to re-perform the work at it's own expense. In no event shall Pace Analytical Services be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Pace Analytical Services.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Pace Analytical Services LLCFacility: **Northeast**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

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Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**EPA 624.1:** m/p-xylene, o-xylene, Naphthalene**EPA 625.1:** alpha-Terpineol**EPA 8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****SM 2540D:** TSS.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

MADEP-APH.**Nonpotable Water:** EPA RSK-175 Dissolved Gases**Biological Tissue Matrix:** EPA 3050B**Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048****EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048**Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)**

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LCHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables).**Microbiology:** SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.** **EPA 522, EPA 537.1.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1 Hg.****SM2340B**

Pace Analytical Services LLCID No.: **17873**Facility: **Northeast**

Revision 27

Department: **Quality Assurance**

Published Date: 01/24/2025

Title: **Certificate/Approval Program Summary**

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Certification IDs:**Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**

CT PH-0826, IL 200077, IN C-MA-03, KY JY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 3090, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048

ANAB/DoD L2474, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

For a complete listing of analytes and methods, please contact your Project Manager.



CHAIN OF CUSTODY

320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: **GEI Consultants Inc.**
Address: **400 Unicorn Park Drive**
Woburn MA, 01801
Phone: **781-721-4000**
Fax:
Email: **labdata@geiconsultants.com**

☐ These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments:

Project-Specific Target Compound List: ☒

AIR ANALYSIS

1/1 PAGE OF 2

Project Information

Project Name: **Tutts St**
Project Location: **Somerville**
Project #: **045163**
Project Manager: **Chris Coner**
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved)

Date Due:

Time:

Date Rec'd in Lab: **2/21/25**

Report Information - Data Deliverables

☐ FAX

☐ ADEx

Criteria Checker:

(Default based on Regulatory Criteria Indicated)

Other Formats:

☒ EMAIL (standard pdf report)

☐ Additional Deliverables:

Report to: (if different than Project Manager)

ALPHA Job #: **L2509914**

Billing Information

☒ Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed Program Res / Comm

ANALYSIS

☐ TO-15
☐ TO-15 SIM
☐ APH
☐ Fixed Gases
☐ Sulfides & Mercaptans by TO-15

All Columns Below Must Be Filled Out

All Columns Below Must Be Filled Out																		
ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION					Sample Matrix*	Sampler's Initials	Can Size	ID Can	ID - Flow Controller	TO-15	TO-15	APH	Fixed	Sulfides	Sample Comments (i.e. PID)	
		End Date	Start Time	End Time	Initial Vacuum	Final Vacuum												
09914-01	045163-97Frank-B	2/19/25	0827	0818	-29.78	-3.94	1A	NMT	6L	3282	01418	X					See attached list of analytes ↓	
02	045163-97Frank-1		0837	0837	-30.42	-8.44	1A	NMT	6L	2098	01743	X						
03	045163-97Frank-2		0835	0835	-30.25	-9.06	1A	NMT	6L	4769	01419	X						
04	045163-97Frank-SS1		0848	0938	-30.48	-2.90	SV	JWG	2.7L	513	0714	X						
05	045163-97Frank-SS2	↓	0844	0936	-30.58	-2.96	SV	JWG	2.7L	4379	0559	X						

*SAMPLE MATRIX CODES

AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type

Relinquished By:

Date/Time

Received By:

Date/Time

Jilliane Duff
GEI Field Room
Jilliane Duff

2/19/25 1702
2/21/25 1255
2/21/25 1256

GEI Field Room
Jilliane Duff
Rec: Linda J. [Signature]

2/19/25 1702
2/21/25 1255
2/21/25 1256
2/21/25 2100

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Indoor Air Sampling Analyte List

- 1,1-Dichloroethane
- 1,1-Dichloroethylene
- trans-1,2-Dichloroethylene
- cis-1,2-Dichloroethylene
- 1,1,1-Trichloroethane
- 1,1,2,2-Tetrachloroethane
- 1,1,2-Trichloroethane
- Tetrachloroethylene
- Trichloroethylene
- Vinyl Chloride



ANALYTICAL REPORT

Lab Number:	L2509935
Client:	GEI Consultants 400 Unicorn Park Drive Woburn, MA 01801
ATTN:	Chris Coner
Phone:	(781) 721-4000
Project Name:	TUFTS ST
Project Number:	045163
Report Date:	03/10/25

The original project report/data package is held by Pace Analytical Services. This report/data package is paginated and should be reproduced only in its entirety. Pace Analytical Services holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: NH ELAP (2249).

120 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.pacelabs.com



Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2509935**Report Date:** 03/10/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2509935-01	045163-31TUFT-IA1	AIR	SOMERVILLE,MA	02/19/25 10:18	02/21/25
L2509935-02	045163-31TUFT-IA2	AIR	SOMERVILLE,MA	02/19/25 10:07	02/21/25
L2509935-03	045163-31TUFT-IA3	AIR	SOMERVILLE,MA	02/19/25 10:04	02/21/25
L2509935-04	045163-31TUFT-IA4	AIR	SOMERVILLE,MA	02/19/25 10:14	02/21/25
L2509935-05	045163-31TUFT-IA5	AIR	SOMERVILLE,MA	02/19/25 10:12	02/21/25
L2509935-06	045163-31TUFT-SV1	SOIL_VAPOR	SOMERVILLE,MA	02/19/25 11:24	02/21/25
L2509935-07	045163-31TUFT-SV2	SOIL_VAPOR	SOMERVILLE,MA	02/19/25 11:30	02/21/25

Project Name: TUFTS ST

Lab Number: L2509935

Project Number: 045163

Report Date: 03/10/25

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	NO
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES
A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	YES
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	NO
For any questions answered "No", please refer to the case narrative section on the following page(s).		

Please note that sample matrix information is located in the Sample Results section of this report.



Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2509935
Report Date: 03/10/25

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Pace Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Pace's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Pace Project Manager and made arrangements for Pace to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2509935
Report Date: 03/10/25

Case Narrative (continued)

MCP Related Narratives

Canisters were released from the laboratory on January 15, 2025. The canister certification data is provided as an addendum.

MCP Volatile Organics in Air

In reference to questions E b/I:

All samples were analyzed for a subset of the MCP compounds per the Chain of Custody.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Christopher J. Anderson

Title: Technical Director/Representative

Date: 03/10/25

QC OUTLIER SUMMARY REPORT

Project Name: TUFTS ST**Lab Number:** L2509935**Project Number:** 045163**Report Date:** 03/10/25

Method	Client ID (Native ID)	Lab ID	Parameter	QC Type	Recovery/RPD (%)	QC Limits (%)	Associated Samples	Data Quality Assessment
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There are no QC Outliers associated with this report.

AIR

Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2509935**Report Date:** 03/10/25**SAMPLE RESULTS**

Lab ID: L2509935-01
 Client ID: 045163-31TUFT-IA1
 Sample Location: SOMERVILLE,MA

Date Collected: 02/19/25 10:18
 Date Received: 02/21/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 02/28/25 21:55
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	0.086	0.020	--	0.341	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	92		60-140
bromochloromethane	99		60-140
chlorobenzene-d5	93		60-140



Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2509935**Report Date:** 03/10/25**SAMPLE RESULTS**

Lab ID: L2509935-02
 Client ID: 045163-31TUFT-IA2
 Sample Location: SOMERVILLE,MA

Date Collected: 02/19/25 10:07
 Date Received: 02/21/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 02/28/25 22:39
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.053	0.020	--	0.359	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	93		60-140
bromochloromethane	99		60-140
chlorobenzene-d5	96		60-140



Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2509935**Report Date:** 03/10/25**SAMPLE RESULTS**

Lab ID: L2509935-03
 Client ID: 045163-31TUFT-IA3
 Sample Location: SOMERVILLE,MA

Date Collected: 02/19/25 10:04
 Date Received: 02/21/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 02/28/25 23:25
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.034	0.020	--	0.231	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	91		60-140
bromochloromethane	97		60-140
chlorobenzene-d5	94		60-140



Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2509935**Report Date:** 03/10/25**SAMPLE RESULTS**

Lab ID: L2509935-04
 Client ID: 045163-31TUFT-IA4
 Sample Location: SOMERVILLE,MA

Date Collected: 02/19/25 10:14
 Date Received: 02/21/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/01/25 00:09
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	91		60-140
bromochloromethane	97		60-140
chlorobenzene-d5	94		60-140



Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2509935**Report Date:** 03/10/25**SAMPLE RESULTS**

Lab ID: L2509935-05
 Client ID: 045163-31TUFT-IA5
 Sample Location: SOMERVILLE,MA

Date Collected: 02/19/25 10:12
 Date Received: 02/21/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/01/25 01:40
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	89		60-140
bromochloromethane	96		60-140
chlorobenzene-d5	93		60-140



Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2509935**Report Date:** 03/10/25**SAMPLE RESULTS**

Lab ID: L2509935-06
 Client ID: 045163-31TUFT-SV1
 Sample Location: SOMERVILLE,MA

Date Collected: 02/19/25 11:24
 Date Received: 02/21/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil_Vapor
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/09/25 04:51
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	0.072	0.020	--	0.393	0.109	--		1
Trichloroethene	0.089	0.020	--	0.478	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	4.60	0.020	--	31.2	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	90		60-140
bromochloromethane	100		60-140
chlorobenzene-d5	94		60-140



Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2509935**Report Date:** 03/10/25**SAMPLE RESULTS**

Lab ID: L2509935-07
 Client ID: 045163-31TUFT-SV2
 Sample Location: SOMERVILLE,MA

Date Collected: 02/19/25 11:30
 Date Received: 02/21/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil_Vapor
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/09/25 05:28
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	0.594	0.020	--	3.24	0.109	--		1
Trichloroethene	0.289	0.020	--	1.55	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	7.06	0.020	--	47.9	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	89		60-140
bromochloromethane	95		60-140
chlorobenzene-d5	96		60-140



Project Name: TUFTS ST

Lab Number: L2509935

Project Number: 045163

Report Date: 03/10/25

Method Blank Analysis Batch Quality Control

Analytical Method: 101,TO-15-SIM

Analytical Date: 02/28/25 21:12

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab for sample(s): 01-05 Batch: WG2035398-4								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1



Project Name: TUFTS ST

Lab Number: L2509935

Project Number: 045163

Report Date: 03/10/25

Method Blank Analysis Batch Quality Control

Analytical Method: 101,TO-15-SIM

Analytical Date: 03/08/25 17:17

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab for sample(s): 06-07 Batch: WG2038187-4								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1



Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS ST

Project Number: 045163

Lab Number: L2509935

Report Date: 03/10/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics in Air by SIM - Mansfield Air Lab Associated sample(s): 01-05 Batch: WG2035398-3								
Vinyl chloride	114		-		70-130	-		
1,1-Dichloroethene	88		-		70-130	-		
trans-1,2-Dichloroethene	94		-		70-130	-		
1,1-Dichloroethane	91		-		70-130	-		
cis-1,2-Dichloroethene	82		-		70-130	-		
1,1,1-Trichloroethane	102		-		70-130	-		
Trichloroethene	89		-		70-130	-		
1,1,2-Trichloroethane	101		-		70-130	-		
Tetrachloroethene	81		-		70-130	-		
1,1,2,2-Tetrachloroethane	105		-		70-130	-		

Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS ST

Project Number: 045163

Lab Number: L2509935

Report Date: 03/10/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics in Air by SIM - Mansfield Air Lab Associated sample(s): 06-07 Batch: WG2038187-3								
Vinyl chloride	83		-		70-130	-		
1,1-Dichloroethene	107		-		70-130	-		
trans-1,2-Dichloroethene	98		-		70-130	-		
1,1-Dichloroethane	102		-		70-130	-		
cis-1,2-Dichloroethene	101		-		70-130	-		
1,1,1-Trichloroethane	95		-		70-130	-		
Trichloroethene	94		-		70-130	-		
1,1,2-Trichloroethane	93		-		70-130	-		
Tetrachloroethene	87		-		70-130	-		
1,1,2,2-Tetrachloroethane	104		-		70-130	-		

Lab Duplicate Analysis

Batch Quality Control

Project Name: TUFTS ST

Project Number: 045163

Lab Number: L2509935

Report Date: 03/10/25

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
MCP Volatile Organics in Air by SIM - Mansfield Air Lab Associated sample(s): 01-05 QC Batch ID: WG2035398-5 QC Sample: L2509935-04 Client ID: 045163-31TUFT-IA4						
Vinyl chloride	ND	ND	ppbV	NC		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1-Dichloroethane	ND	ND	ppbV	NC		25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1,1-Trichloroethane	ND	ND	ppbV	NC		25
Trichloroethene	ND	ND	ppbV	NC		25
1,1,2-Trichloroethane	ND	ND	ppbV	NC		25
Tetrachloroethene	ND	ND	ppbV	NC		25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC		25

Project Name: TUFTS ST

Project Number: 045163

Serial_No:03102516:50
Lab Number: L2509935

Report Date: 03/10/25

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt	Flow Controller Leak Chk	Flow Out mL/min	Flow In	% RPD
L2509935-01	045163-31TUFT-IA1	0140	Flow 5	01/15/25	502722		-	-	-	Pass	3.0	3.1	3
L2509935-01	045163-31TUFT-IA1	1965	6.0L Can	01/15/25	502722	L2501761-07	Pass	-29.6	-8.5	-	-	-	-
L2509935-02	045163-31TUFT-IA2	0962	Flow 5	01/15/25	502722		-	-	-	Pass	3.0	3.3	10
L2509935-02	045163-31TUFT-IA2	1564	6.0L Can	01/15/25	502722	L2501761-07	Pass	-29.5	-7.7	-	-	-	-
L2509935-03	045163-31TUFT-IA3	01059	Flow 5	01/15/25	502722		-	-	-	Pass	3.0	3.6	18
L2509935-03	045163-31TUFT-IA3	4331	6.0L Can	01/15/25	502722	L2501761-07	Pass	-29.6	-8.0	-	-	-	-
L2509935-04	045163-31TUFT-IA4	01885	Flow 5	01/15/25	502722		-	-	-	Pass	3.0	3.3	10
L2509935-04	045163-31TUFT-IA4	4327	6.0L Can	01/15/25	502722	L2501761-07	Pass	-29.4	-7.8	-	-	-	-
L2509935-05	045163-31TUFT-IA5	0120	Flow 5	01/15/25	502722		-	-	-	Pass	3.0	3.3	10
L2509935-05	045163-31TUFT-IA5	1532	6.0L Can	01/15/25	502722	L2501761-07	Pass	-29.5	-6.4	-	-	-	-
L2509935-06	045163-31TUFT-SV1	01442	Flow 2	02/12/25	507112		-	-	-	Pass	36.0	35.9	0
L2509935-06	045163-31TUFT-SV1	470	2.7L Can	02/12/25	507112	L2505339-02	Pass	29.8	-4.9	-	-	-	-
L2509935-07	045163-31TUFT-SV2	01715	Flow 2	02/12/25	507112		-	-	-	Pass	36.0	37.8	5
L2509935-07	045163-31TUFT-SV2	2736	2.7L Can	02/12/25	507112	L2505339-02	Pass	-30.2	-2.6	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2501761
Report Date: 03/10/25

Air Canister Certification Results

Lab ID: L2501761-07
Client ID: CAN 1667 SHELF 51
Sample Location:

Date Collected: 01/13/25 12:00
Date Received: 01/13/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 01/13/25 22:17
Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	1.00	--	ND	2.46	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2501761
Report Date: 03/10/25

Air Canister Certification Results

Lab ID: L2501761-07
Client ID: CAN 1667 SHELF 51
Sample Location:

Date Collected: 01/13/25 12:00
Date Received: 01/13/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2501761
Report Date: 03/10/25

Air Canister Certification Results

Lab ID: L2501761-07
Client ID: CAN 1667 SHELF 51
Sample Location:

Date Collected: 01/13/25 12:00
Date Received: 01/13/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2501761
Report Date: 03/10/25

Air Canister Certification Results

Lab ID: L2501761-07
Client ID: CAN 1667 SHELF 51
Sample Location:

Date Collected: 01/13/25 12:00
Date Received: 01/13/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	0.996	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2501761
Report Date: 03/10/25

Air Canister Certification Results

Lab ID: L2501761-07
 Client ID: CAN 1667 SHELF 51
 Sample Location:

Date Collected: 01/13/25 12:00
 Date Received: 01/13/25
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				
No Tentatively Identified Compounds				

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	91		60-140
Bromochloromethane	93		60-140
chlorobenzene-d5	90		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2501761
Report Date: 03/10/25

Air Canister Certification Results

Lab ID: L2501761-07
Client ID: CAN 1667 SHELF 51
Sample Location:

Date Collected: 01/13/25 12:00
Date Received: 01/13/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 01/13/25 22:17
Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2501761
Report Date: 03/10/25

Air Canister Certification Results

Lab ID: L2501761-07
Client ID: CAN 1667 SHELF 51
Sample Location:

Date Collected: 01/13/25 12:00
Date Received: 01/13/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2501761
Report Date: 03/10/25

Air Canister Certification Results

Lab ID: L2501761-07
Client ID: CAN 1667 SHELF 51
Sample Location:

Date Collected: 01/13/25 12:00
Date Received: 01/13/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	88		60-140
bromochloromethane	93		60-140
chlorobenzene-d5	90		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2505339
Report Date: 03/10/25

Air Canister Certification Results

Lab ID: L2505339-02
Client ID: CAN 3489 SHELF 78
Sample Location:

Date Collected: 01/30/25 18:00
Date Received: 01/31/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 01/31/25 20:03
Analyst: JFI

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	1.00	--	ND	2.46	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2505339
Report Date: 03/10/25

Air Canister Certification Results

Lab ID: L2505339-02
Client ID: CAN 3489 SHELF 78
Sample Location:

Date Collected: 01/30/25 18:00
Date Received: 01/31/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2505339
Report Date: 03/10/25

Air Canister Certification Results

Lab ID: L2505339-02
Client ID: CAN 3489 SHELF 78
Sample Location:

Date Collected: 01/30/25 18:00
Date Received: 01/31/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2505339
Report Date: 03/10/25

Air Canister Certification Results

Lab ID: L2505339-02
Client ID: CAN 3489 SHELF 78
Sample Location:

Date Collected: 01/30/25 18:00
Date Received: 01/31/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	0.996	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2505339**Project Number:** CANISTER QC BAT**Report Date:** 03/10/25**Air Canister Certification Results**

Lab ID: L2505339-02

Date Collected: 01/30/25 18:00

Client ID: CAN 3489 SHELF 78

Date Received: 01/31/25

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				
No Tentatively Identified Compounds				

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	110		60-140
Bromochloromethane	109		60-140
chlorobenzene-d5	110		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2505339
Report Date: 03/10/25

Air Canister Certification Results

Lab ID: L2505339-02
Client ID: CAN 3489 SHELF 78
Sample Location:

Date Collected: 01/30/25 18:00
Date Received: 01/31/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 01/31/25 20:03
Analyst: JFI

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2505339
Report Date: 03/10/25

Air Canister Certification Results

Lab ID: L2505339-02
Client ID: CAN 3489 SHELF 78
Sample Location:

Date Collected: 01/30/25 18:00
Date Received: 01/31/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2505339**Project Number:** CANISTER QC BAT**Report Date:** 03/10/25**Air Canister Certification Results**

Lab ID: L2505339-02

Date Collected: 01/30/25 18:00

Client ID: CAN 3489 SHELF 78

Date Received: 01/31/25

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	102		60-140
bromochloromethane	107		60-140
chlorobenzene-d5	106		60-140



Project Name: TUFTS ST**Lab Number:** L2509935**Project Number:** 045163**Report Date:** 03/10/25**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information**Cooler** **Custody Seal**

NA Present/Intact

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2509935-01A	Canister - 6L (Batch Certified)	NA	NA			Y	Absent		MCP-TO15-SIM(30)
L2509935-02A	Canister - 6L (Batch Certified)	NA	NA			Y	Absent		MCP-TO15-SIM(30)
L2509935-03A	Canister - 6L (Batch Certified)	NA	NA			Y	Absent		MCP-TO15-SIM(30)
L2509935-04A	Canister - 6L (Batch Certified)	NA	NA			Y	Absent		MCP-TO15-SIM(30)
L2509935-05A	Canister - 6L (Batch Certified)	NA	NA			Y	Absent		MCP-TO15-SIM(30)
L2509935-06A	Canister - 2.7L (Batch Certified)	NA	NA			Y	Absent		MCP-TO15-SIM(30)
L2509935-07A	Canister - 2.7L (Batch Certified)	NA	NA			Y	Absent		MCP-TO15-SIM(30)

Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2509935
Report Date: 03/10/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report



Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2509935
Report Date: 03/10/25

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

Report Format: Data Usability Report



Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2509935
Report Date: 03/10/25

Data Qualifiers

- ND** - Not detected at the reporting limit (RL) for the sample.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: TUFTS ST**Lab Number:** L2509935**Project Number:** 045163**Report Date:** 03/10/25

REFERENCES

- 101 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air (EPA/625/R-96/010b:January 1999) with QC Requirements & Performance Standards for the Analysis of TO-15 under the Massachusetts Contingency Plan, WSC-CAM-IXB, July 2010.

LIMITATION OF LIABILITIES

Pace Analytical Services performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Pace Analytical Services shall be to re-perform the work at it's own expense. In no event shall Pace Analytical Services be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Pace Analytical Services.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Pace Analytical Services LLCFacility: **Northeast**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

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Published Date: 01/24/2025

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Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**EPA 624.1:** m/p-xylene, o-xylene, Naphthalene**EPA 625.1:** alpha-Terpineol**EPA 8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****SM 2540D:** TSS.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

MADEP-APH.**Nonpotable Water:** EPA RSK-175 Dissolved Gases**Biological Tissue Matrix:** EPA 3050B**Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048****EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048**Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)**

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LCHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables).**Microbiology:** SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.** **EPA 522, EPA 537.1.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1 Hg.****SM2340B**

Pace Analytical Services LLCID No.:**17873**Facility: **Northeast**

Revision 27

Department: **Quality Assurance**

Published Date: 01/24/2025

Title: **Certificate/Approval Program Summary**

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Certification IDs:**Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**

CT PH-0826, IL 200077, IN C-MA-03, KY JY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 3090, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048

ANAB/DoD L2474, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

For a complete listing of analytes and methods, please contact your Project Manager.



CHAIN OF CUSTODY

AIR ANALYSIS

1/1 PAGE 2 OF 2

320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: GEI Consultants Inc.

Address: 400 Unicorn Park
Drive, Woburn MA, 01801

Phone: 781-721-4000

Fax:

Email: labdata@geiconsultants.com

☐ These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments:

Project-Specific Target Compound List: ☒

Project Information

Project Name: Tufts St

Project Location: Somerville, MA

Project #: 045169

Project Manager: Chris Coner

ALPHA Quote #:

Turn-Around Time

☒ Standard☐ RUSH (only confirmed if pre-approved)

Date Due:

Time:

Date Rec'd in Lab: 2/21/25

Report Information - Data Deliverables

☐ FAX☐ ADEx

Criteria Checker:

(Default based on Regulatory Criteria indicated)

Other Formats:

☒ EMAIL (standard pdf report)☐ Additional Deliverables:

Report to: (if different than Project Manager)

ALPHA Job #: L2509935

Billing Information

☒ Same as Client info

PO #:

Regulatory Requirements/Report Limits

State/Fed Program Res / Comm

ANALYSIS

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION						Sample Matrix*	Sampler's Initials	Can Size	ID Can	ID - Flow Controller	TO-15	TO-15 SIM	APH	Fixed Gases	Sulfides & Mercaptans	Sample Comments (i.e. PID)
		End Date	Start Time	End Time	Initial Vacuum	Final Vacuum												
09935-01	045163-31Tuft-1A1	2/19/25	1018	1018	-30.86	-4.32	1A	NMT	6L	1965	0140		x					see attached list of analytes
02	045163-31Tuft-1A2		1007	1007	-30.75	-7.92	1A	NMT	6L	1564	0962		x					
03	045163-31Tuft-1A3		1004	1004	-30.36	-8.57	1A	NMT	6L	4331	01059		x					
04	045163-31Tuft-1A4		1014	1014	-30.42	-7.97	1A	JWG	6L	48327	01885		x					
05	045163-31Tuft-1A5		1012	1012	-30.56	-6.38	1A	NMT	6L	1532	0120		x					
06	045163-31Tuft-SV1		1024	1124	-30.24	-6.12	SV	NMT	2.7L	470	01442	x						
07	045163-31Tuft-SV2	✓	1030	1130	-30.57	-4.52	SV	NMT	2.7L	2736	01715	x						

*SAMPLE MATRIX CODES

AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Relinquished By:

Date/Time

Received By:

Date/Time

Jillian Gush
GEI Field Room
Jillian Gush

2/19/25 1703
2/21/25 1254
2/21/25 1254

GEI Field Room
Jillian Gush
Bryan Gush
Rec'd by JAG

2/19/25 1703
2/21/25 1254
2-21-25 1254
2/21/25 2100

CHAIN OF CUSTODY

320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: GEI Consultants Inc.

Address: 400 Unicorn Parks
Drive, Woburn MA, 01801

Phone: 781-221-4000

Fax:

Email: labdata@gerconsultants.com

☐ These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments:

Project-Specific Target Compound List: ☒

All Columns Below Must Be Filled Out[illegible]

*SAMPLE MATRIX CODES

AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Relinquished By:

Date/Time

Received By:

Date/Time:

Jillian Gustaf
GEI Field Room
Jillian Gustaf
Bri Bri Pore

219125 1703

1121125 1254

2/2/12 5 12 54

2011 13/15

Gel Field Book

Get Field Room
Bulldog Beach

Be a Good Guy

Wang, David

21425 1703

2	19	23	103
2	21	25	125

201.05 175

2-21-20 128

Indoor Air Sampling Analyte List

- 1,1-Dichloroethane
- 1,1-Dichloroethylene
- trans-1,2-Dichloroethylene
- cis-1,2-Dichloroethylene
- 1,1,1-Trichloroethane
- 1,1,2,2-Tetrachloroethane
- 1,1,2-Trichloroethane
- Tetrachloroethylene
- Trichloroethylene
- Vinyl Chloride



ANALYTICAL REPORT

Lab Number:	L2509944
Client:	GEI Consultants 400 Unicorn Park Drive Woburn, MA 01801
ATTN:	Chris Coner
Phone:	(781) 721-4000
Project Name:	TUFTS ST
Project Number:	045163
Report Date:	03/11/25

The original project report/data package is held by Pace Analytical Services. This report/data package is paginated and should be reproduced only in its entirety. Pace Analytical Services holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: NH ELAP (2249).

120 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.pacelabs.com



Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2509944**Report Date:** 03/11/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2509944-01	045163-21MORT-FF1	AIR	SOMERVILLE,MA	02/19/25 11:01	02/21/25
L2509944-02	045163-21MORT-B1	AIR	SOMERVILLE,MA	02/19/25 11:05	02/21/25
L2509944-03	045163-156GLEN-FF1	AIR	SOMERVILLE,MA	02/19/25 11:09	02/21/25
L2509944-04	045163-156GLEN-B1	AIR	SOMERVILLE,MA	02/19/25 11:13	02/21/25
L2509944-05	045163-21MORT-SV1	SOIL_VAPOR	SOMERVILLE,MA	02/19/25 13:15	02/21/25
L2509944-06	045163-21MORT-SV2	SOIL_VAPOR	SOMERVILLE,MA	02/19/25 13:30	02/21/25
L2509944-07	045163-156GLEN-SV1	SOIL_VAPOR	SOMERVILLE,MA	02/19/25 14:23	02/21/25
L2509944-08	UNUSED CAN #3432	SOIL_VAPOR	Not Specified		02/21/25

Project Name: TUFTS ST

Lab Number: L2509944

Project Number: 045163

Report Date: 03/11/25

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	NO
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES
A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	YES
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	NO
For any questions answered "No", please refer to the case narrative section on the following page(s).		

Please note that sample matrix information is located in the Sample Results section of this report.



Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2509944
Report Date: 03/11/25

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Pace Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Pace's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Pace Project Manager and made arrangements for Pace to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2509944
Report Date: 03/11/25

Case Narrative (continued)

MCP Related Narratives

Canisters were released from the laboratory on February 12, 2025. The canister certification data is provided as an addendum.

MCP Volatile Organics in Air

In reference to questions E b/I:

All samples were analyzed for a subset of the MCP compounds per the Chain of Custody.

Sample Receipt

L2509944-06: The sample had an RPD for the pre- and post-flow controller calibration check (27% RPD) that was outside of the control limit (20% RPD). The final pressure recorded by the laboratory of the associated canister was 0.0 inches of mercury. No further action was required.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Christopher J. Anderson

Title: Technical Director/Representative

Date: 03/11/25

QC OUTLIER SUMMARY REPORT

Project Name: TUFTS ST**Lab Number:** L2509944**Project Number:** 045163**Report Date:** 03/11/25

Method	Client ID (Native ID)	Lab ID	Parameter	QC Type	Recovery/RPD (%)	QC Limits (%)	Associated Samples	Data Quality Assessment
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There are no QC Outliers associated with this report.

AIR

Project Name: TUFTS ST**Lab Number:** L2509944**Project Number:** 045163**Report Date:** 03/11/25**SAMPLE RESULTS**

Lab ID: L2509944-01
 Client ID: 045163-21MORT-FF1
 Sample Location: SOMERVILLE,MA

Date Collected: 02/19/25 11:01
 Date Received: 02/21/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/04/25 02:34
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	79		60-140
bromochloromethane	88		60-140
chlorobenzene-d5	83		60-140



Project Name: TUFTS ST**Lab Number:** L2509944**Project Number:** 045163**Report Date:** 03/11/25**SAMPLE RESULTS**

Lab ID: L2509944-02
 Client ID: 045163-21MORT-B1
 Sample Location: SOMERVILLE,MA

Date Collected: 02/19/25 11:05
 Date Received: 02/21/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/04/25 03:12
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	78		60-140
bromochloromethane	88		60-140
chlorobenzene-d5	81		60-140



Project Name: TUFTS ST**Lab Number:** L2509944**Project Number:** 045163**Report Date:** 03/11/25**SAMPLE RESULTS**

Lab ID: L2509944-03
 Client ID: 045163-156GLEN-FF1
 Sample Location: SOMERVILLE,MA

Date Collected: 02/19/25 11:09
 Date Received: 02/21/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/04/25 03:50
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	85		60-140
bromochloromethane	89		60-140
chlorobenzene-d5	91		60-140



Project Name: TUFTS ST**Lab Number:** L2509944**Project Number:** 045163**Report Date:** 03/11/25**SAMPLE RESULTS**

Lab ID: L2509944-04
 Client ID: 045163-156GLEN-B1
 Sample Location: SOMERVILLE,MA

Date Collected: 02/19/25 11:13
 Date Received: 02/21/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/04/25 04:28
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	74		60-140
bromochloromethane	88		60-140
chlorobenzene-d5	80		60-140



Project Name: TUFTS ST**Lab Number:** L2509944**Project Number:** 045163**Report Date:** 03/11/25**SAMPLE RESULTS**

Lab ID: L2509944-05
 Client ID: 045163-21MORT-SV1
 Sample Location: SOMERVILLE,MA

Date Collected: 02/19/25 13:15
 Date Received: 02/21/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil_Vapor
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/09/25 06:06
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	0.123	0.020	--	0.671	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.336	0.020	--	2.28	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	87		60-140
bromochloromethane	94		60-140
chlorobenzene-d5	96		60-140



Project Name: TUFTS ST**Lab Number:** L2509944**Project Number:** 045163**Report Date:** 03/11/25**SAMPLE RESULTS**

Lab ID: L2509944-06
 Client ID: 045163-21MORT-SV2
 Sample Location: SOMERVILLE,MA

Date Collected: 02/19/25 13:30
 Date Received: 02/21/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil_Vapor
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/09/25 06:44
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	2.82	0.020	--	15.4	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.698	0.020	--	4.73	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	89		60-140
bromochloromethane	96		60-140
chlorobenzene-d5	97		60-140



Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2509944**Report Date:** 03/11/25**SAMPLE RESULTS**

Lab ID: L2509944-07
 Client ID: 045163-156GLEN-SV1
 Sample Location: SOMERVILLE,MA

Date Collected: 02/19/25 14:23
 Date Received: 02/21/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil_Vapor
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/09/25 22:33
 Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	0.027	0.020	--	0.145	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.284	0.020	--	1.93	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	92		60-140
bromochloromethane	95		60-140
chlorobenzene-d5	96		60-140



Project Name: TUFTS ST

Lab Number: L2509944

Project Number: 045163

Report Date: 03/11/25

Method Blank Analysis Batch Quality Control

Analytical Method: 101,TO-15-SIM

Analytical Date: 03/03/25 18:09

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab for sample(s): 01-04 Batch: WG2036173-4								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1



Project Name: TUFTS ST

Lab Number: L2509944

Project Number: 045163

Report Date: 03/11/25

Method Blank Analysis Batch Quality Control

Analytical Method: 101,TO-15-SIM

Analytical Date: 03/08/25 17:17

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab for sample(s): 05-06 Batch: WG2038187-4								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1



Project Name: TUFTS ST

Lab Number: L2509944

Project Number: 045163

Report Date: 03/11/25

Method Blank Analysis Batch Quality Control

Analytical Method: 101,TO-15-SIM

Analytical Date: 03/09/25 17:27

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab for sample(s): 07 Batch: WG2038336-4								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1



Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS ST

Project Number: 045163

Lab Number: L2509944

Report Date: 03/11/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics in Air by SIM - Mansfield Air Lab Associated sample(s): 01-04 Batch: WG2036173-3								
Vinyl chloride	79		-		70-130	-		
1,1-Dichloroethene	80		-		70-130	-		
trans-1,2-Dichloroethene	83		-		70-130	-		
1,1-Dichloroethane	76		-		70-130	-		
cis-1,2-Dichloroethene	76		-		70-130	-		
1,1,1-Trichloroethane	82		-		70-130	-		
Trichloroethene	86		-		70-130	-		
1,1,2-Trichloroethane	86		-		70-130	-		
Tetrachloroethene	86		-		70-130	-		
1,1,2,2-Tetrachloroethane	93		-		70-130	-		

Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS ST

Project Number: 045163

Lab Number: L2509944

Report Date: 03/11/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics in Air by SIM - Mansfield Air Lab Associated sample(s): 05-06 Batch: WG2038187-3								
Vinyl chloride	83		-		70-130	-		
1,1-Dichloroethene	107		-		70-130	-		
trans-1,2-Dichloroethene	98		-		70-130	-		
1,1-Dichloroethane	102		-		70-130	-		
cis-1,2-Dichloroethene	101		-		70-130	-		
1,1,1-Trichloroethane	95		-		70-130	-		
Trichloroethene	94		-		70-130	-		
1,1,2-Trichloroethane	93		-		70-130	-		
Tetrachloroethene	87		-		70-130	-		
1,1,2,2-Tetrachloroethane	104		-		70-130	-		

Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS ST

Project Number: 045163

Lab Number: L2509944

Report Date: 03/11/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics in Air by SIM - Mansfield Air Lab Associated sample(s): 07 Batch: WG2038336-3								
Vinyl chloride	93		-		70-130	-		
1,1-Dichloroethene	86		-		70-130	-		
trans-1,2-Dichloroethene	108		-		70-130	-		
1,1-Dichloroethane	104		-		70-130	-		
cis-1,2-Dichloroethene	102		-		70-130	-		
1,1,1-Trichloroethane	101		-		70-130	-		
Trichloroethene	105		-		70-130	-		
1,1,2-Trichloroethane	106		-		70-130	-		
Tetrachloroethene	98		-		70-130	-		
1,1,2,2-Tetrachloroethane	104		-		70-130	-		

Project Name: TUFTS ST

Serial_No:03112516:00
Lab Number: L2509944

Project Number: 045163

Report Date: 03/11/25

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt	Flow Controller Leak Chk	Flow Out mL/min	Flow In	% RPD
L2509944-01	045163-21MORT-FF1	01887	Flow 5	02/12/25	507112		-	-	-	Pass	3.0	3.2	6
L2509944-01	045163-21MORT-FF1	3955	6.0L Can	02/12/25	507112	L2507266-04	Pass	-30.2	-7.4	-	-	-	-
L2509944-02	045163-21MORT-B1	0821	Flow 5	02/12/25	507112		-	-	-	Pass	3.0	3.2	6
L2509944-02	045163-21MORT-B1	2931	6.0L Can	02/12/25	507112	L2507266-04	Pass	-30.2	-8.0	-	-	-	-
L2509944-03	045163-156GLEN-FF1	02267	Flow 5	02/12/25	507112		-	-	-	Pass	3.0	3.4	13
L2509944-03	045163-156GLEN-FF1	1858	6.0L Can	02/12/25	507112	L2507266-04	Pass	-30.2	-8.8	-	-	-	-
L2509944-04	045163-156GLEN-B1	0498	Flow 5	02/12/25	507112		-	-	-	Pass	3.0	3.4	13
L2509944-04	045163-156GLEN-B1	2918	6.0L Can	02/12/25	507112	L2507266-04	Pass	-30.2	-5.8	-	-	-	-
L2509944-05	045163-21MORT-SV1	0261	Flow 2	02/12/25	507112		-	-	-	Pass	36.0	35.8	1
L2509944-05	045163-21MORT-SV1	3180	2.7L Can	02/12/25	507112	L2505339-02	Pass	-30.1	-1.0	-	-	-	-
L2509944-06	045163-21MORT-SV2	01085	Flow 2	01/15/25	502722		-	-	-	Pass	36.3	47.6	27
L2509944-06	045163-21MORT-SV2	374	2.7L Can	01/15/25	502722	L2501761-06	Pass	-29.5	0.0	-	-	-	-
L2509944-07	045163-156GLEN-SV1	01731	Flow 2	02/12/25	507112		-	-	-	Pass	36.0	31.5	13
L2509944-07	045163-156GLEN-SV1	3018	2.7L Can	02/12/25	507112	L2506480-06	Pass	-30.1	-5.7	-	-	-	-
L2509944-08	UNUSED CAN #3432	1012	Flow 2	01/15/25	502722		-	-	-	Pass	35.7	46.0	25

Project Name: TUFTS ST
Project Number: 045163

Serial_No:03112516:00
Lab Number: L2509944
Report Date: 03/11/25

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt	Flow Controller Leak Chk	Flow Out mL/min	Flow In	% RPD
L2509944-08	UNUSED CAN #3432	3432	2.7L Can	01/15/25	502722	L2501761-06	Pass	-29.3	-29.3	-	-	-	-



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2501761
Report Date: 03/11/25

Air Canister Certification Results

Lab ID: L2501761-06
Client ID: CAN 141 SHELF 8
Sample Location:

Date Collected: 01/13/25 12:00
Date Received: 01/13/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 01/13/25 21:39
Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	1.00	--	ND	2.46	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2501761
Report Date: 03/11/25

Air Canister Certification Results

Lab ID: L2501761-06
Client ID: CAN 141 SHELF 8
Sample Location:

Date Collected: 01/13/25 12:00
Date Received: 01/13/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2501761
Report Date: 03/11/25

Air Canister Certification Results

Lab ID: L2501761-06
Client ID: CAN 141 SHELF 8
Sample Location:

Date Collected: 01/13/25 12:00
Date Received: 01/13/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2501761
Report Date: 03/11/25

Air Canister Certification Results

Lab ID: L2501761-06
Client ID: CAN 141 SHELF 8
Sample Location:

Date Collected: 01/13/25 12:00
Date Received: 01/13/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	0.996	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2501761**Project Number:** CANISTER QC BAT**Report Date:** 03/11/25**Air Canister Certification Results**

Lab ID: L2501761-06

Date Collected: 01/13/25 12:00

Client ID: CAN 141 SHELF 8

Date Received: 01/13/25

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	93		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	89		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2501761
Report Date: 03/11/25

Air Canister Certification Results

Lab ID: L2501761-06
Client ID: CAN 141 SHELF 8
Sample Location:

Date Collected: 01/13/25 12:00
Date Received: 01/13/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 01/13/25 21:39
Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2501761
Report Date: 03/11/25

Air Canister Certification Results

Lab ID: L2501761-06
Client ID: CAN 141 SHELF 8
Sample Location:

Date Collected: 01/13/25 12:00
Date Received: 01/13/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2501761**Project Number:** CANISTER QC BAT**Report Date:** 03/11/25**Air Canister Certification Results**

Lab ID: L2501761-06

Date Collected: 01/13/25 12:00

Client ID: CAN 141 SHELF 8

Date Received: 01/13/25

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	88		60-140
bromochloromethane	94		60-140
chlorobenzene-d5	90		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2505339
Report Date: 03/11/25

Air Canister Certification Results

Lab ID: L2505339-02
Client ID: CAN 3489 SHELF 78
Sample Location:

Date Collected: 01/30/25 18:00
Date Received: 01/31/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 01/31/25 20:03
Analyst: JFI

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	1.00	--	ND	2.46	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2505339
Report Date: 03/11/25

Air Canister Certification Results

Lab ID: L2505339-02
Client ID: CAN 3489 SHELF 78
Sample Location:

Date Collected: 01/30/25 18:00
Date Received: 01/31/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2505339
Report Date: 03/11/25

Air Canister Certification Results

Lab ID: L2505339-02
Client ID: CAN 3489 SHELF 78
Sample Location:

Date Collected: 01/30/25 18:00
Date Received: 01/31/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2505339
Report Date: 03/11/25

Air Canister Certification Results

Lab ID: L2505339-02
Client ID: CAN 3489 SHELF 78
Sample Location:

Date Collected: 01/30/25 18:00
Date Received: 01/31/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	0.996	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2505339**Project Number:** CANISTER QC BAT**Report Date:** 03/11/25**Air Canister Certification Results**

Lab ID: L2505339-02

Date Collected: 01/30/25 18:00

Client ID: CAN 3489 SHELF 78

Date Received: 01/31/25

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				
No Tentatively Identified Compounds				

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	110		60-140
Bromochloromethane	109		60-140
chlorobenzene-d5	110		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2505339
Report Date: 03/11/25

Air Canister Certification Results

Lab ID: L2505339-02
Client ID: CAN 3489 SHELF 78
Sample Location:

Date Collected: 01/30/25 18:00
Date Received: 01/31/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 01/31/25 20:03
Analyst: JFI

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2505339
Report Date: 03/11/25

Air Canister Certification Results

Lab ID: L2505339-02
Client ID: CAN 3489 SHELF 78
Sample Location:

Date Collected: 01/30/25 18:00
Date Received: 01/31/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2505339**Project Number:** CANISTER QC BAT**Report Date:** 03/11/25**Air Canister Certification Results**

Lab ID: L2505339-02

Date Collected: 01/30/25 18:00

Client ID: CAN 3489 SHELF 78

Date Received: 01/31/25

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	102		60-140
bromochloromethane	107		60-140
chlorobenzene-d5	106		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2506480
Report Date: 03/11/25

Air Canister Certification Results

Lab ID: L2506480-06
Client ID: CAN 548 SHELF 20
Sample Location:

Date Collected: 02/06/25 11:00
Date Received: 02/06/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 02/06/25 23:16
Analyst: JFI

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	1.00	--	ND	2.46	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2506480
Report Date: 03/11/25

Air Canister Certification Results

Lab ID: L2506480-06
Client ID: CAN 548 SHELF 20
Sample Location:

Date Collected: 02/06/25 11:00
Date Received: 02/06/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2506480
Report Date: 03/11/25

Air Canister Certification Results

Lab ID: L2506480-06
Client ID: CAN 548 SHELF 20
Sample Location:

Date Collected: 02/06/25 11:00
Date Received: 02/06/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2506480**Project Number:** CANISTER QC BAT**Report Date:** 03/11/25**Air Canister Certification Results**

Lab ID: L2506480-06

Date Collected: 02/06/25 11:00

Client ID: CAN 548 SHELF 20

Date Received: 02/06/25

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	0.996	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2506480**Project Number:** CANISTER QC BAT**Report Date:** 03/11/25**Air Canister Certification Results**

Lab ID: L2506480-06

Date Collected: 02/06/25 11:00

Client ID: CAN 548 SHELF 20

Date Received: 02/06/25

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	104		60-140
Bromochloromethane	106		60-140
chlorobenzene-d5	100		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2506480
Report Date: 03/11/25

Air Canister Certification Results

Lab ID: L2506480-06
Client ID: CAN 548 SHELF 20
Sample Location:

Date Collected: 02/06/25 11:00
Date Received: 02/06/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 02/06/25 23:16
Analyst: JFI

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2506480
Report Date: 03/11/25

Air Canister Certification Results

Lab ID: L2506480-06
Client ID: CAN 548 SHELF 20
Sample Location:

Date Collected: 02/06/25 11:00
Date Received: 02/06/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2506480**Project Number:** CANISTER QC BAT**Report Date:** 03/11/25**Air Canister Certification Results**

Lab ID: L2506480-06

Date Collected: 02/06/25 11:00

Client ID: CAN 548 SHELF 20

Date Received: 02/06/25

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	97		60-140
bromochloromethane	103		60-140
chlorobenzene-d5	96		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507266
Report Date: 03/11/25

Air Canister Certification Results

Lab ID: L2507266-04
Client ID: CAN 3597 SHELF 38
Sample Location:

Date Collected: 02/10/25 11:00
Date Received: 02/10/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 02/11/25 00:12
Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	1.00	--	ND	2.46	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507266
Report Date: 03/11/25

Air Canister Certification Results

Lab ID: L2507266-04
Client ID: CAN 3597 SHELF 38
Sample Location:

Date Collected: 02/10/25 11:00
Date Received: 02/10/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507266
Report Date: 03/11/25

Air Canister Certification Results

Lab ID: L2507266-04
Client ID: CAN 3597 SHELF 38
Sample Location:

Date Collected: 02/10/25 11:00
Date Received: 02/10/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2507266**Project Number:** CANISTER QC BAT**Report Date:** 03/11/25**Air Canister Certification Results**

Lab ID: L2507266-04

Date Collected: 02/10/25 11:00

Client ID: CAN 3597 SHELF 38

Date Received: 02/10/25

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	0.996	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2507266**Project Number:** CANISTER QC BAT**Report Date:** 03/11/25**Air Canister Certification Results**

Lab ID: L2507266-04

Date Collected: 02/10/25 11:00

Client ID: CAN 3597 SHELF 38

Date Received: 02/10/25

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				
No Tentatively Identified Compounds				

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	90		60-140
Bromochloromethane	98		60-140
chlorobenzene-d5	94		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507266
Report Date: 03/11/25

Air Canister Certification Results

Lab ID: L2507266-04
Client ID: CAN 3597 SHELF 38
Sample Location:

Date Collected: 02/10/25 11:00
Date Received: 02/10/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 02/11/25 00:12
Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507266
Report Date: 03/11/25

Air Canister Certification Results

Lab ID: L2507266-04
Client ID: CAN 3597 SHELF 38
Sample Location:

Date Collected: 02/10/25 11:00
Date Received: 02/10/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2507266**Project Number:** CANISTER QC BAT**Report Date:** 03/11/25**Air Canister Certification Results**

Lab ID: L2507266-04

Date Collected: 02/10/25 11:00

Client ID: CAN 3597 SHELF 38

Date Received: 02/10/25

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	89		60-140
bromochloromethane	99		60-140
chlorobenzene-d5	93		60-140



Project Name: TUFTS ST**Lab Number:** L2509944**Project Number:** 045163**Report Date:** 03/11/25**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information**Cooler** **Custody Seal**

NA Present/Intact

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2509944-01A	Canister - 6L (Batch Certified)	NA	NA			Y	Absent		MCP-TO15-SIM(30)
L2509944-02A	Canister - 6L (Batch Certified)	NA	NA			Y	Absent		MCP-TO15-SIM(30)
L2509944-03A	Canister - 6L (Batch Certified)	NA	NA			Y	Absent		MCP-TO15-SIM(30)
L2509944-04A	Canister - 6L (Batch Certified)	NA	NA			Y	Absent		MCP-TO15-SIM(30)
L2509944-05A	Canister - 2.7L (Batch Certified)	NA	NA			Y	Absent		MCP-TO15-SIM(30)
L2509944-06A	Canister - 2.7L (Batch Certified)	NA	NA			Y	Absent		MCP-TO15-SIM(30)
L2509944-07A	Canister - 2.7L (Batch Certified)	NA	NA			Y	Absent		MCP-TO15-SIM(30)
L2509944-08A	Canister - 2.7L (Batch Certified)	NA	NA			Y	Absent		CLEAN-FEE()

Project Name: TUFTS ST**Lab Number:** L2509944**Project Number:** 045163**Report Date:** 03/11/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report

Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2509944
Report Date: 03/11/25

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

Report Format: Data Usability Report



Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2509944
Report Date: 03/11/25

Data Qualifiers

- ND** - Not detected at the reporting limit (RL) for the sample.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: TUFTS ST**Lab Number:** L2509944**Project Number:** 045163**Report Date:** 03/11/25

REFERENCES

- 101 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air (EPA/625/R-96/010b:January 1999) with QC Requirements & Performance Standards for the Analysis of TO-15 under the Massachusetts Contingency Plan, WSC-CAM-IXB, July 2010.

LIMITATION OF LIABILITIES

Pace Analytical Services performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Pace Analytical Services shall be to re-perform the work at it's own expense. In no event shall Pace Analytical Services be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Pace Analytical Services.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Pace Analytical Services LLCFacility: **Northeast**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

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Published Date: 01/24/2025

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Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**EPA 624.1:** m/p-xylene, o-xylene, Naphthalene**EPA 625.1:** alpha-Terpineol**EPA 8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****SM 2540D:** TSS.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

MADEP-APH.**Nonpotable Water:** EPA RSK-175 Dissolved Gases**Biological Tissue Matrix:** EPA 3050B**Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048****EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048**Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)**

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LCHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables).**Microbiology:** SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.** **EPA 522, EPA 537.1.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1 Hg.****SM2340B**

Pace Analytical Services LLCID No.:**17873**Facility: **Northeast**

Revision 27

Department: **Quality Assurance**

Published Date: 01/24/2025

Title: **Certificate/Approval Program Summary**

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Certification IDs:**Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**

CT PH-0826, IL 200077, IN C-MA-03, KY JY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 3090, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048

ANAB/DoD L2474, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

For a complete listing of analytes and methods, please contact your Project Manager.



AIR ANALYSIS

CHAIN OF CUSTODY

320 Forbes Blvd., Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: **GEI Consultants, Inc.**
Address: **400 Unicorn Park Drive, Woburn, MA 01801**
Phone: **781-721-4000**

Fax:

Email: **labdata@geiconsultants.com**

☐ These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments:

Project-Specific Target Compound List: ☒

Project Information

Project Name: **Tufts St**
Project Location: **Somerville, MA**
Project #: **045163**
Project Manager: **Chris Connor**
ALPHA Quote #

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved)

Date Due: Time:

Date Rec'd in Lab: **2/21/25**

Report Information - Data Deliverables

☐ FAX
☐ ADEx
Criteria Checker:
(Default based on Regulatory Criteria Indicated)
Other Formats:
☒ EMAIL (standard pdf report)
☐ Additional Deliverables:
Report to: (if different than Project Manager)

ALPHA Job #: **L2509944**

Billing Information

☒ Same as Client info PO #

Regulatory Requirements/Report Limits

State/Fed	Program	Res / Comm

ANALYSIS

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION						Sample Matrix*	Sampler's Initials	Can Size	ID Can	ID - Flow Controller	TO-15	TO-15	APH	Fixed Gases	Sulfides	Sample Comments (i.e. PID)
		End Date	Start Time	End Time	Initial Vacuum	Final Vacuum												
09944-01	045163-21Mort-FF1	2/19/25	1101	1101	-30.65	-7.55	1A	NMT	6L	3955	01887		X					See attached list of analytes
02	045163-21Mort-B1		1105	1105	-30.81	-9.26	1A	NMT	6L	2931	0821		X					
03	045163-156Glen-FF1		1109	1109	-30.48	-9.48	1A	NMT	6L	1858	02267		X					
04	045163-156Glen-B1		1113	1113	-29.55	-6.90	1A	NMT	6L	2918	0498		X					
05	045163-21Mort-SV1		1215	1315	-30.56	-3.46	SV	JWG	2.7L	3180 374	0261		X					
06	045163-21Mort-SV2		1238	1330	-30.50	-2.92	SV	JWG	2.7L	374	01085		X					
07	045163-156Glen-SV1	✓	1323	1423	-30.45	-7.50	SV	NMT	2.7L	3018	01131		X					

*SAMPLE MATRIX CODES

AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Relinquished By:

Date/Time

Received By:

Date/Time

Jillian Duff
GEI Field Room
Jillian Duff

2/19/25 1701
2/21/25 1253
2/22/25 1254

GEI Field Room
Jillian Duff
Ben Ben
Rec: *Just* *NH*

2/19/25 1701
2/21/25 1253
2-21-25 1254
2/21/25 2100

Indoor Air Sampling Analyte List

- 1,1-Dichloroethane
- 1,1-Dichloroethylene
- trans-1,2-Dichloroethylene
- cis-1,2-Dichloroethylene
- 1,1,1-Trichloroethane
- 1,1,2,2-Tetrachloroethane
- 1,1,2-Trichloroethane
- Tetrachloroethylene
- Trichloroethylene
- Vinyl Chloride



ANALYTICAL REPORT

Lab Number:	L2511774
Client:	GEI Consultants 400 Unicorn Park Drive Woburn, MA 01801
ATTN:	Chris Coner
Phone:	(781) 721-4000
Project Name:	TUFTS ST
Project Number:	045163
Report Date:	03/26/25

The original project report/data package is held by Pace Analytical Services. This report/data package is paginated and should be reproduced only in its entirety. Pace Analytical Services holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: NH ELAP (2249).

120 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.pacelabs.com



Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2511774
Report Date: 03/26/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2511774-01	045163-34KNOWL-F1	AIR	SOMERVILLE, MA	02/25/25 15:15	03/03/25
L2511774-02	045163-34KNOWL-B1	AIR	SOMERVILLE, MA	02/25/25 15:20	03/03/25

Project Name: TUFTS ST

Lab Number: L2511774

Project Number: 045163

Report Date: 03/26/25

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	NO
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES
A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	YES
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	NO
For any questions answered "No", please refer to the case narrative section on the following page(s).		

Please note that sample matrix information is located in the Sample Results section of this report.



Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2511774
Report Date: 03/26/25

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Pace Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Pace's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Pace Project Manager and made arrangements for Pace to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2511774
Report Date: 03/26/25

Case Narrative (continued)

Report Submission

March 26, 2025: This final report includes the results of all requested analyses.

Report Submission

March 13, 2025: This is a preliminary report containing final date for the samples reported. A final report will be issued as soon as the associated air samples which are currently on hold are either released for analysis or disposal or after 5 business days.

MCP Related Narratives

Canisters were released from the laboratory on February 13, 2025. The canister certification data is provided as an addendum.

MCP Volatile Organics in Air

In reference to questions E b/I:

All samples were analyzed for a subset of the MCP compounds per the Chain of Custody.

Sample Receipt

L2511774-01: The sample has an RPD for the pre- and post-flow controller calibration check (72% RPD) outside of the control limit of 20%. The final pressure of the associated canister recorded by the laboratory was 0.0 inches of mercury. No further action was required.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Christopher J. Anderson

Title: Technical Director/Representative

Date: 03/26/25

QC OUTLIER SUMMARY REPORT

Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2511774**Report Date:** 03/26/25

Method	Client ID (Native ID)	Lab ID	Parameter	QC Type	Recovery/RPD (%)	QC Limits (%)	Associated Samples	Data Quality Assessment
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There are no QC Outliers associated with this report.

AIR

Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2511774**Report Date:** 03/26/25**SAMPLE RESULTS**

Lab ID: L2511774-02
 Client ID: 045163-34KNOWL-B1
 Sample Location: SOMERVILLE, MA

Date Collected: 02/25/25 15:20
 Date Received: 03/03/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/11/25 19:40
 Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	0.034	0.020	--	0.135	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	87		60-140
bromochloromethane	90		60-140
chlorobenzene-d5	92		60-140



Project Name: TUFTS ST

Lab Number: L2511774

Project Number: 045163

Report Date: 03/26/25

Method Blank Analysis Batch Quality Control

Analytical Method: 101,TO-15-SIM

Analytical Date: 03/11/25 16:00

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab for sample(s): 02 Batch: WG2039279-4								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1



Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS ST

Project Number: 045163

Lab Number: L2511774

Report Date: 03/26/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics in Air by SIM - Mansfield Air Lab Associated sample(s): 02 Batch: WG2039279-3								
Vinyl chloride	123		-		70-130	-		
1,1-Dichloroethene	97		-		70-130	-		
trans-1,2-Dichloroethene	98		-		70-130	-		
1,1-Dichloroethane	91		-		70-130	-		
cis-1,2-Dichloroethene	89		-		70-130	-		
1,1,1-Trichloroethane	92		-		70-130	-		
Trichloroethene	88		-		70-130	-		
1,1,2-Trichloroethane	83		-		70-130	-		
Tetrachloroethene	100		-		70-130	-		
1,1,2,2-Tetrachloroethane	94		-		70-130	-		

Project Name: TUFTS ST

Project Number: 045163

Serial_No: 03262512:21
Lab Number: L2511774

Report Date: 03/26/25

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt	Flow Controller Leak Chk	Flow Out mL/min	Flow In	% RPD
L2511774-01	045163-34KNOWL-F1	01258	Flow 5	02/13/25	505312		-	-	-	Pass	3.0	6.4	72
L2511774-01	045163-34KNOWL-F1	3373	6.0L Can	02/13/25	505312	L2507631-01	Pass	-29.7	0.0	-	-	-	-
L2511774-02	045163-34KNOWL-B1	02047	Flow 5	02/13/25	505312		-	-	-	Pass	3.0	3.3	10
L2511774-02	045163-34KNOWL-B1	4251	6.0L Can	02/13/25	505312	L2507631-01	Pass	-29.5	-5.4	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507631
Report Date: 03/26/25

Air Canister Certification Results

Lab ID: L2507631-01
Client ID: CAN 5168 SHELF 51
Sample Location:

Date Collected: 02/11/25 12:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 02/12/25 03:24
Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	1.00	--	ND	2.46	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507631
Report Date: 03/26/25

Air Canister Certification Results

Lab ID: L2507631-01
Client ID: CAN 5168 SHELF 51
Sample Location:

Date Collected: 02/11/25 12:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507631
Report Date: 03/26/25

Air Canister Certification Results

Lab ID: L2507631-01
Client ID: CAN 5168 SHELF 51
Sample Location:

Date Collected: 02/11/25 12:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507631
Report Date: 03/26/25

Air Canister Certification Results

Lab ID: L2507631-01
Client ID: CAN 5168 SHELF 51
Sample Location:

Date Collected: 02/11/25 12:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	0.996	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507631
Report Date: 03/26/25

Air Canister Certification Results

Lab ID: L2507631-01
 Client ID: CAN 5168 SHELF 51
 Sample Location:

Date Collected: 02/11/25 12:00
 Date Received: 02/11/25
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				
No Tentatively Identified Compounds				

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	89		60-140
Bromochloromethane	96		60-140
chlorobenzene-d5	92		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507631
Report Date: 03/26/25

Air Canister Certification Results

Lab ID: L2507631-01
Client ID: CAN 5168 SHELF 51
Sample Location:

Date Collected: 02/11/25 12:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 02/12/25 03:24
Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507631
Report Date: 03/26/25

Air Canister Certification Results

Lab ID: L2507631-01
Client ID: CAN 5168 SHELF 51
Sample Location:

Date Collected: 02/11/25 12:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2507631**Project Number:** CANISTER QC BAT**Report Date:** 03/26/25**Air Canister Certification Results**

Lab ID: L2507631-01

Date Collected: 02/11/25 12:00

Client ID: CAN 5168 SHELF 51

Date Received: 02/11/25

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	89		60-140
bromochloromethane	97		60-140
chlorobenzene-d5	92		60-140



Project Name: TUFTS ST
Project Number: 045163

Serial_No:03262512:21
Lab Number: L2511774
Report Date: 03/26/25

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
NA	Present/Intact

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2511774-01A	Canister - 6L (Batch Certified)	NA	NA			Y	Absent		CANCELLED()
L2511774-02A	Canister - 6L (Batch Certified)	NA	NA			Y	Absent		MCP-TO15-SIM(30)

Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2511774
Report Date: 03/26/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report



Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2511774
Report Date: 03/26/25

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

Report Format: Data Usability Report



Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2511774
Report Date: 03/26/25

Data Qualifiers

- ND** - Not detected at the reporting limit (RL) for the sample.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: TUFTS ST**Lab Number:** L2511774**Project Number:** 045163**Report Date:** 03/26/25

REFERENCES

- 101 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air (EPA/625/R-96/010b:January 1999) with QC Requirements & Performance Standards for the Analysis of TO-15 under the Massachusetts Contingency Plan, WSC-CAM-IXB, July 2010.

LIMITATION OF LIABILITIES

Pace Analytical Services performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Pace Analytical Services shall be to re-perform the work at it's own expense. In no event shall Pace Analytical Services be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Pace Analytical Services.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Pace Analytical Services LLCFacility: **Northeast**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

Revision 27

Published Date: 01/24/2025

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Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**EPA 624.1:** m/p-xylene, o-xylene, Naphthalene**EPA 625.1:** alpha-Terpineol**EPA 8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****SM 2540D:** TSS.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

MADEP-APH.**Nonpotable Water:** EPA RSK-175 Dissolved Gases**Biological Tissue Matrix:** EPA 3050B**Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048****EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048**Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)**

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables).**Microbiology:** SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg. EPA 522, EPA 537.1.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1 Hg.****SM2340B**

Pace Analytical Services LLCID No.: **17873**Facility: **Northeast**

Revision 27

Department: **Quality Assurance**

Published Date: 01/24/2025

Title: **Certificate/Approval Program Summary**

Page 2 of 2

Certification IDs:**Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**

CT PH-0826, IL 200077, IN C-MA-03, KY JY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 3090, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048

ANAB/DoD L2474, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

For a complete listing of analytes and methods, please contact your Project Manager.

Indoor Air Sampling Analyte List

- 1,1-Dichloroethane
- 1,1-Dichloroethylene
- trans-1,2-Dichloroethylene
- cis-1,2-Dichloroethylene
- 1,1,1-Trichloroethane
- 1,1,2,2-Tetrachloroethane
- 1,1,2-Trichloroethane
- Tetrachloroethylene
- Trichloroethylene
- Vinyl Chloride



ANALYTICAL REPORT

Lab Number:	L2511786
Client:	GEI Consultants 400 Unicorn Park Drive Woburn, MA 01801
ATTN:	Chris Coner
Phone:	(781) 721-4000
Project Name:	TUFTS ST
Project Number:	045163
Report Date:	03/13/25

The original project report/data package is held by Pace Analytical Services. This report/data package is paginated and should be reproduced only in its entirety. Pace Analytical Services holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: NH ELAP (2249).

120 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.pacelabs.com



Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2511786**Report Date:** 03/13/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2511786-01	045163-19MORT-1	AIR	SOMERVILLE, MA	02/27/25 10:52	03/03/25
L2511786-02	045163-19MORT-B	AIR	SOMERVILLE, MA	02/27/25 10:55	03/03/25

Project Name: TUFTS ST

Lab Number: L2511786

Project Number: 045163

Report Date: 03/13/25

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	NO
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES
A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	YES
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	NO
For any questions answered "No", please refer to the case narrative section on the following page(s).		

Please note that sample matrix information is located in the Sample Results section of this report.



Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2511786
Report Date: 03/13/25

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Pace Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Pace's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Pace Project Manager and made arrangements for Pace to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2511786
Report Date: 03/13/25

Case Narrative (continued)

MCP Related Narratives

Canisters were released from the laboratory on February 13, 2025. The canister certification data is provided as an addendum.

MCP Volatile Organics in Air

In reference to questions E b/I:

All samples were analyzed for a subset of the MCP compounds per the Chain of Custody.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Christopher J. Anderson

Title: Technical Director/Representative

Date: 03/13/25

QC OUTLIER SUMMARY REPORT

Project Name: TUFTS ST**Lab Number:** L2511786**Project Number:** 045163**Report Date:** 03/13/25

Method	Client ID (Native ID)	Lab ID	Parameter	QC Type	Recovery/RPD (%)	QC Limits (%)	Associated Samples	Data Quality Assessment
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There are no QC Outliers associated with this report.

AIR

Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2511786**Report Date:** 03/13/25**SAMPLE RESULTS**

Lab ID: L2511786-01
 Client ID: 045163-19MORT-1
 Sample Location: SOMERVILLE, MA

Date Collected: 02/27/25 10:52
 Date Received: 03/03/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/11/25 20:18
 Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.020	0.020	--	0.136	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	85		60-140
bromochloromethane	87		60-140
chlorobenzene-d5	90		60-140



Project Name: TUFTS ST**Lab Number:** L2511786**Project Number:** 045163**Report Date:** 03/13/25**SAMPLE RESULTS**

Lab ID: L2511786-02
 Client ID: 045163-19MORT-B
 Sample Location: SOMERVILLE, MA

Date Collected: 02/27/25 10:55
 Date Received: 03/03/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/11/25 20:57
 Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.021	0.020	--	0.142	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	82		60-140
bromochloromethane	85		60-140
chlorobenzene-d5	86		60-140



Project Name: TUFTS ST

Lab Number: L2511786

Project Number: 045163

Report Date: 03/13/25

Method Blank Analysis Batch Quality Control

Analytical Method: 101,TO-15-SIM

Analytical Date: 03/11/25 16:00

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab for sample(s): 01-02 Batch: WG2039279-4								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1



Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS ST

Project Number: 045163

Lab Number: L2511786

Report Date: 03/13/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics in Air by SIM - Mansfield Air Lab Associated sample(s): 01-02 Batch: WG2039279-3								
Vinyl chloride	123		-		70-130	-		
1,1-Dichloroethene	97		-		70-130	-		
trans-1,2-Dichloroethene	98		-		70-130	-		
1,1-Dichloroethane	91		-		70-130	-		
cis-1,2-Dichloroethene	89		-		70-130	-		
1,1,1-Trichloroethane	92		-		70-130	-		
Trichloroethene	88		-		70-130	-		
1,1,2-Trichloroethane	83		-		70-130	-		
Tetrachloroethene	100		-		70-130	-		
1,1,2,2-Tetrachloroethane	94		-		70-130	-		

Project Name: TUFTS ST

Project Number: 045163

Lab Number: Serial_No:03132515:13
L2511786

Report Date: 03/13/25

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt	Flow Controller Leak Chk	Flow Out mL/min	Flow In	% RPD
L2511786-01	045163-19MORT-1	0096	Flow 5	02/13/25	505312		-	-	-	Pass	3.0	3.5	15
L2511786-01	045163-19MORT-1	5192	6.0L Can	02/13/25	505312	L2507631-01	Pass	-30.2	-3.5	-	-	-	-
L2511786-02	045163-19MORT-B	0632	Flow 5	02/13/25	505312		-	-	-	Pass	3.0	3.1	3
L2511786-02	045163-19MORT-B	2976	6.0L Can	02/13/25	505312	L2507266-03	Pass	-30.2	-6.1	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507266
Report Date: 03/13/25

Air Canister Certification Results

Lab ID: L2507266-03
Client ID: CAN 3927 SHELF 37
Sample Location:

Date Collected: 02/10/25 11:00
Date Received: 02/10/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 02/10/25 23:33
Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	1.00	--	ND	2.46	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507266
Report Date: 03/13/25

Air Canister Certification Results

Lab ID: L2507266-03
Client ID: CAN 3927 SHELF 37
Sample Location:

Date Collected: 02/10/25 11:00
Date Received: 02/10/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507266
Report Date: 03/13/25

Air Canister Certification Results

Lab ID: L2507266-03
Client ID: CAN 3927 SHELF 37
Sample Location:

Date Collected: 02/10/25 11:00
Date Received: 02/10/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507266
Report Date: 03/13/25

Air Canister Certification Results

Lab ID: L2507266-03
Client ID: CAN 3927 SHELF 37
Sample Location:

Date Collected: 02/10/25 11:00
Date Received: 02/10/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	0.996	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507266
Report Date: 03/13/25

Air Canister Certification Results

Lab ID: L2507266-03
 Client ID: CAN 3927 SHELF 37
 Sample Location:

Date Collected: 02/10/25 11:00
 Date Received: 02/10/25
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				
No Tentatively Identified Compounds				

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	89		60-140
Bromochloromethane	97		60-140
chlorobenzene-d5	94		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507266
Report Date: 03/13/25

Air Canister Certification Results

Lab ID: L2507266-03
Client ID: CAN 3927 SHELF 37
Sample Location:

Date Collected: 02/10/25 11:00
Date Received: 02/10/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 02/10/25 23:33
Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507266
Report Date: 03/13/25

Air Canister Certification Results

Lab ID: L2507266-03
Client ID: CAN 3927 SHELF 37
Sample Location:

Date Collected: 02/10/25 11:00
Date Received: 02/10/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	0.077	0.040	--	0.334	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2507266**Project Number:** CANISTER QC BAT**Report Date:** 03/13/25**Air Canister Certification Results**

Lab ID: L2507266-03

Date Collected: 02/10/25 11:00

Client ID: CAN 3927 SHELF 37

Date Received: 02/10/25

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	88		60-140
bromochloromethane	98		60-140
chlorobenzene-d5	94		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507631
Report Date: 03/13/25

Air Canister Certification Results

Lab ID: L2507631-01
Client ID: CAN 5168 SHELF 51
Sample Location:

Date Collected: 02/11/25 12:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 02/12/25 03:24
Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	1.00	--	ND	2.46	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507631
Report Date: 03/13/25

Air Canister Certification Results

Lab ID: L2507631-01
Client ID: CAN 5168 SHELF 51
Sample Location:

Date Collected: 02/11/25 12:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507631
Report Date: 03/13/25

Air Canister Certification Results

Lab ID: L2507631-01
Client ID: CAN 5168 SHELF 51
Sample Location:

Date Collected: 02/11/25 12:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507631
Report Date: 03/13/25

Air Canister Certification Results

Lab ID: L2507631-01
Client ID: CAN 5168 SHELF 51
Sample Location:

Date Collected: 02/11/25 12:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	0.996	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507631
Report Date: 03/13/25

Air Canister Certification Results

Lab ID: L2507631-01
 Client ID: CAN 5168 SHELF 51
 Sample Location:

Date Collected: 02/11/25 12:00
 Date Received: 02/11/25
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				
No Tentatively Identified Compounds				

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	89		60-140
Bromochloromethane	96		60-140
chlorobenzene-d5	92		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507631
Report Date: 03/13/25

Air Canister Certification Results

Lab ID: L2507631-01
Client ID: CAN 5168 SHELF 51
Sample Location:

Date Collected: 02/11/25 12:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 02/12/25 03:24
Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507631
Report Date: 03/13/25

Air Canister Certification Results

Lab ID: L2507631-01
Client ID: CAN 5168 SHELF 51
Sample Location:

Date Collected: 02/11/25 12:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2507631**Project Number:** CANISTER QC BAT**Report Date:** 03/13/25**Air Canister Certification Results**

Lab ID: L2507631-01

Date Collected: 02/11/25 12:00

Client ID: CAN 5168 SHELF 51

Date Received: 02/11/25

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	89		60-140
bromochloromethane	97		60-140
chlorobenzene-d5	92		60-140



Project Name: TUFTS ST
Project Number: 045163

Serial_No:03132515:13
Lab Number: L2511786
Report Date: 03/13/25

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
NA	Present/Intact

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2511786-01A	Canister - 6L (Batch Certified)	NA	NA			Y	Absent		MCP-TO15-SIM(30)
L2511786-02A	Canister - 6L (Batch Certified)	NA	NA			Y	Absent		MCP-TO15-SIM(30)

Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2511786
Report Date: 03/13/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report



Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2511786
Report Date: 03/13/25

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

Report Format: Data Usability Report



Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2511786
Report Date: 03/13/25

Data Qualifiers

- ND** - Not detected at the reporting limit (RL) for the sample.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: TUFTS ST**Lab Number:** L2511786**Project Number:** 045163**Report Date:** 03/13/25

REFERENCES

- 101 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air (EPA/625/R-96/010b:January 1999) with QC Requirements & Performance Standards for the Analysis of TO-15 under the Massachusetts Contingency Plan, WSC-CAM-IXB, July 2010.

LIMITATION OF LIABILITIES

Pace Analytical Services performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Pace Analytical Services shall be to re-perform the work at it's own expense. In no event shall Pace Analytical Services be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Pace Analytical Services.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Pace Analytical Services LLCFacility: **Northeast**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

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Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**EPA 624.1:** m/p-xylene, o-xylene, Naphthalene**EPA 625.1:** alpha-Terpineol**EPA 8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****SM 2540D:** TSS.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

MADEP-APH.**Nonpotable Water:** EPA RSK-175 Dissolved Gases**Biological Tissue Matrix:** EPA 3050B**Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048****EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048**Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)**

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables).**Microbiology:** SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg. EPA 522, EPA 537.1.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1 Hg.****SM2340B**

Pace Analytical Services LLCID No.:**17873**Facility: **Northeast**

Revision 27

Department: **Quality Assurance**

Published Date: 01/24/2025

Title: **Certificate/Approval Program Summary**

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Certification IDs:**Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**

CT PH-0826, IL 200077, IN C-MA-03, KY JY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 3090, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048

ANAB/DoD L2474, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

For a complete listing of analytes and methods, please contact your Project Manager.

Indoor Air Sampling Analyte List

- 1,1-Dichloroethane
- 1,1-Dichloroethylene
- trans-1,2-Dichloroethylene
- cis-1,2-Dichloroethylene
- 1,1,1-Trichloroethane
- 1,1,2,2-Tetrachloroethane
- 1,1,2-Trichloroethane
- Tetrachloroethylene
- Trichloroethylene
- Vinyl Chloride



ANALYTICAL REPORT

Lab Number:	L2511794
Client:	GEI Consultants 400 Unicorn Park Drive Woburn, MA 01801
ATTN:	Chris Coner
Phone:	(781) 721-4000
Project Name:	TUFTS ST
Project Number:	045163
Report Date:	03/13/25

The original project report/data package is held by Pace Analytical Services. This report/data package is paginated and should be reproduced only in its entirety. Pace Analytical Services holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: NH ELAP (2249).

120 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.pacelabs.com



Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2511794
Report Date: 03/13/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2511794-01	045163-93FRANKLIN-1	AIR	SOMERVILLE, MA	02/28/25 10:05	03/03/25
L2511794-02	045163-91FRANKLIN-1	AIR	SOMERVILLE, MA	02/28/25 10:00	03/03/25
L2511794-03	045163-93FRANKLIN-B	AIR	SOMERVILLE, MA	02/28/25 10:02	03/03/25

Project Name: TUFTS ST

Lab Number: L2511794

Project Number: 045163

Report Date: 03/13/25

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	NO
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES
A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	YES
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	NO
For any questions answered "No", please refer to the case narrative section on the following page(s).		

Please note that sample matrix information is located in the Sample Results section of this report.



Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2511794
Report Date: 03/13/25

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Pace Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Pace's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Pace Project Manager and made arrangements for Pace to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2511794
Report Date: 03/13/25

Case Narrative (continued)

MCP Related Narratives

Canisters were released from the laboratory on February 13, 2025. The canister certification data is provided as an addendum.

MCP Volatile Organics in Air

In reference to questions E b/I:

All samples were analyzed for a subset of the MCP compounds per the Chain of Custody.

Sample Receipt

L2511794-01: The sample has an RPD for the pre- and post-flow controller calibration check (67% RPD) outside of the control limit of 20%. The final pressure of the associated canister recorded by the laboratory was -10.1 inches of mercury. No further action was required.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Christopher J. Anderson

Title: Technical Director/Representative

Date: 03/13/25

QC OUTLIER SUMMARY REPORT

Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2511794**Report Date:** 03/13/25

Method	Client ID (Native ID)	Lab ID	Parameter	QC Type	Recovery/RPD (%)	QC Limits (%)	Associated Samples	Data Quality Assessment
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There are no QC Outliers associated with this report.

AIR

Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2511794**Report Date:** 03/13/25**SAMPLE RESULTS**

Lab ID: L2511794-01
 Client ID: 045163-93FRANKLIN-1
 Sample Location: SOMERVILLE, MA

Date Collected: 02/28/25 10:05
 Date Received: 03/03/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/11/25 21:38
 Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.027	0.020	--	0.183	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	80		60-140
bromochloromethane	83		60-140
chlorobenzene-d5	86		60-140



Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2511794**Report Date:** 03/13/25**SAMPLE RESULTS**

Lab ID: L2511794-02
 Client ID: 045163-91FRANKLIN-1
 Sample Location: SOMERVILLE, MA

Date Collected: 02/28/25 10:00
 Date Received: 03/03/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/11/25 22:19
 Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.024	0.020	--	0.163	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	78		60-140
bromochloromethane	81		60-140
chlorobenzene-d5	84		60-140



Project Name: TUFTS ST**Lab Number:** L2511794**Project Number:** 045163**Report Date:** 03/13/25**SAMPLE RESULTS**

Lab ID: L2511794-03
 Client ID: 045163-93FRANKLIN-B
 Sample Location: SOMERVILLE, MA

Date Collected: 02/28/25 10:02
 Date Received: 03/03/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/11/25 22:58
 Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.023	0.020	--	0.156	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	81		60-140
bromochloromethane	84		60-140
chlorobenzene-d5	88		60-140



Project Name: TUFTS ST

Lab Number: L2511794

Project Number: 045163

Report Date: 03/13/25

Method Blank Analysis Batch Quality Control

Analytical Method: 101,TO-15-SIM

Analytical Date: 03/11/25 16:00

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab for sample(s): 01-03 Batch: WG2039279-4								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1



Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS ST

Project Number: 045163

Lab Number: L2511794

Report Date: 03/13/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics in Air by SIM - Mansfield Air Lab Associated sample(s): 01-03 Batch: WG2039279-3								
Vinyl chloride	123		-		70-130	-		
1,1-Dichloroethene	97		-		70-130	-		
trans-1,2-Dichloroethene	98		-		70-130	-		
1,1-Dichloroethane	91		-		70-130	-		
cis-1,2-Dichloroethene	89		-		70-130	-		
1,1,1-Trichloroethane	92		-		70-130	-		
Trichloroethene	88		-		70-130	-		
1,1,2-Trichloroethane	83		-		70-130	-		
Tetrachloroethene	100		-		70-130	-		
1,1,2,2-Tetrachloroethane	94		-		70-130	-		

Project Name: TUFTS ST

Project Number: 045163

Serial_No: 03132511:19
Lab Number: L2511794

Report Date: 03/13/25

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt	Flow Controller Leak Chk	Flow Out mL/min	Flow In	% RPD
L2511794-01	045163-93FRANKLIN-1	02439	Flow 5	02/13/25	505312		-	-	-	Pass	3.0	1.5	67
L2511794-01	045163-93FRANKLIN-1	2116	6.0L Can	02/13/25	505312	L2507631-01	Pass	-30.2	-10.1	-	-	-	-
L2511794-02	045163-91FRANKLIN-1	0400	Flow 5	02/13/25	505312		-	-	-	Pass	3.0	3.1	3
L2511794-02	045163-91FRANKLIN-1	5190	6.0L Can	02/13/25	505312	L2507631-01	Pass	-30.3	-9.6	-	-	-	-
L2511794-03	045163-93FRANKLIN-B	0008	Flow 5	02/13/25	505312		-	-	-	Pass	3.0	3.2	6
L2511794-03	045163-93FRANKLIN-B	992	6.0L Can	02/13/25	505312	L2507313-08	Pass	-29.6	-7.5	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507313
Report Date: 03/13/25

Air Canister Certification Results

Lab ID: L2507313-08
Client ID: CAN 2465 SHELF 43
Sample Location:

Date Collected: 02/11/25 10:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 02/12/25 01:30
Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	1.00	--	ND	2.46	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507313
Report Date: 03/13/25

Air Canister Certification Results

Lab ID: L2507313-08
Client ID: CAN 2465 SHELF 43
Sample Location:

Date Collected: 02/11/25 10:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507313
Report Date: 03/13/25

Air Canister Certification Results

Lab ID: L2507313-08
Client ID: CAN 2465 SHELF 43
Sample Location:

Date Collected: 02/11/25 10:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507313
Report Date: 03/13/25

Air Canister Certification Results

Lab ID: L2507313-08
Client ID: CAN 2465 SHELF 43
Sample Location:

Date Collected: 02/11/25 10:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	0.996	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507313
Report Date: 03/13/25

Air Canister Certification Results

Lab ID: L2507313-08
 Client ID: CAN 2465 SHELF 43
 Sample Location:

Date Collected: 02/11/25 10:00
 Date Received: 02/11/25
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				
No Tentatively Identified Compounds				

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	89		60-140
Bromochloromethane	96		60-140
chlorobenzene-d5	92		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507313
Report Date: 03/13/25

Air Canister Certification Results

Lab ID: L2507313-08
Client ID: CAN 2465 SHELF 43
Sample Location:

Date Collected: 02/11/25 10:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 02/12/25 01:30
Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507313
Report Date: 03/13/25

Air Canister Certification Results

Lab ID: L2507313-08
Client ID: CAN 2465 SHELF 43
Sample Location:

Date Collected: 02/11/25 10:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2507313**Project Number:** CANISTER QC BAT**Report Date:** 03/13/25**Air Canister Certification Results**

Lab ID: L2507313-08

Date Collected: 02/11/25 10:00

Client ID: CAN 2465 SHELF 43

Date Received: 02/11/25

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	89		60-140
bromochloromethane	97		60-140
chlorobenzene-d5	93		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507631
Report Date: 03/13/25

Air Canister Certification Results

Lab ID: L2507631-01
Client ID: CAN 5168 SHELF 51
Sample Location:

Date Collected: 02/11/25 12:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 02/12/25 03:24
Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	1.00	--	ND	2.46	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507631
Report Date: 03/13/25

Air Canister Certification Results

Lab ID: L2507631-01
Client ID: CAN 5168 SHELF 51
Sample Location:

Date Collected: 02/11/25 12:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507631
Report Date: 03/13/25

Air Canister Certification Results

Lab ID: L2507631-01
Client ID: CAN 5168 SHELF 51
Sample Location:

Date Collected: 02/11/25 12:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507631
Report Date: 03/13/25

Air Canister Certification Results

Lab ID: L2507631-01
Client ID: CAN 5168 SHELF 51
Sample Location:

Date Collected: 02/11/25 12:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	0.996	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2507631**Project Number:** CANISTER QC BAT**Report Date:** 03/13/25**Air Canister Certification Results**

Lab ID: L2507631-01

Date Collected: 02/11/25 12:00

Client ID: CAN 5168 SHELF 51

Date Received: 02/11/25

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				
No Tentatively Identified Compounds				

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	89		60-140
Bromochloromethane	96		60-140
chlorobenzene-d5	92		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507631
Report Date: 03/13/25

Air Canister Certification Results

Lab ID: L2507631-01
Client ID: CAN 5168 SHELF 51
Sample Location:

Date Collected: 02/11/25 12:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 02/12/25 03:24
Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507631
Report Date: 03/13/25

Air Canister Certification Results

Lab ID: L2507631-01
Client ID: CAN 5168 SHELF 51
Sample Location:

Date Collected: 02/11/25 12:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2507631**Project Number:** CANISTER QC BAT**Report Date:** 03/13/25**Air Canister Certification Results**

Lab ID: L2507631-01

Date Collected: 02/11/25 12:00

Client ID: CAN 5168 SHELF 51

Date Received: 02/11/25

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	89		60-140
bromochloromethane	97		60-140
chlorobenzene-d5	92		60-140



Project Name: TUFTS ST
Project Number: 045163

Serial_No:03132511:19
Lab Number: L2511794
Report Date: 03/13/25

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
NA	Present/Intact

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2511794-01A	Canister - 6L (Batch Certified)	NA	NA			Y	Absent		MCP-TO15-SIM(30)
L2511794-02A	Canister - 6L (Batch Certified)	NA	NA			Y	Absent		MCP-TO15-SIM(30)
L2511794-03A	Canister - 6L (Batch Certified)	NA	NA			Y	Absent		MCP-TO15-SIM(30)

Project Name: TUFTS ST**Lab Number:** L2511794**Project Number:** 045163**Report Date:** 03/13/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report

Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2511794
Report Date: 03/13/25

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

Report Format: Data Usability Report



Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2511794
Report Date: 03/13/25

Data Qualifiers

- ND** - Not detected at the reporting limit (RL) for the sample.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: TUFTS ST**Lab Number:** L2511794**Project Number:** 045163**Report Date:** 03/13/25

REFERENCES

- 101 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air (EPA/625/R-96/010b:January 1999) with QC Requirements & Performance Standards for the Analysis of TO-15 under the Massachusetts Contingency Plan, WSC-CAM-IXB, July 2010.

LIMITATION OF LIABILITIES

Pace Analytical Services performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Pace Analytical Services shall be to re-perform the work at it's own expense. In no event shall Pace Analytical Services be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Pace Analytical Services.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Pace Analytical Services LLCFacility: **Northeast**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

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Certification Information**The following analytes are not included in our Primary NELAP Scope of Accreditation:****Westborough Facility – 8 Walkup Dr. Westborough, MA 01581****EPA 624.1:** m/p-xylene, o-xylene, Naphthalene**EPA 625.1:** alpha-Terpineol**EPA 8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****SM 2540D:** TSS.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

MADEP-APH.**Nonpotable Water:** EPA RSK-175 Dissolved Gases**Biological Tissue Matrix:** EPA 3050B**Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048****EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Nonpotable Water: EPA RSK-175 Dissolved Gases**The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:****Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)****The following analytes are included in our Massachusetts DEP Scope of Accreditation****Westborough Facility – 8 Walkup Dr. Westborough, MA 01581****Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables).**Microbiology:** SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg. EPA 522, EPA 537.1.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1 Hg.****SM2340B**

Pace Analytical Services LLCID No.:**17873**Facility: **Northeast**

Revision 27

Department: **Quality Assurance**

Published Date: 01/24/2025

Title: **Certificate/Approval Program Summary**

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Certification IDs:**Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**

CT PH-0826, IL 200077, IN C-MA-03, KY JY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 3090, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048

ANAB/DoD L2474, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

For a complete listing of analytes and methods, please contact your Project Manager.

Indoor Air Sampling Analyte List

- 1,1-Dichloroethane
- 1,1-Dichloroethylene
- trans-1,2-Dichloroethylene
- cis-1,2-Dichloroethylene
- 1,1,1-Trichloroethane
- 1,1,2,2-Tetrachloroethane
- 1,1,2-Trichloroethane
- Tetrachloroethylene
- Trichloroethylene
- Vinyl Chloride



ANALYTICAL REPORT

Lab Number:	L2511801
Client:	GEI Consultants 400 Unicorn Park Drive Woburn, MA 01801
ATTN:	Chris Coner
Phone:	(781) 721-4000
Project Name:	TUFTS ST
Project Number:	045163
Report Date:	03/13/25

The original project report/data package is held by Pace Analytical Services. This report/data package is paginated and should be reproduced only in its entirety. Pace Analytical Services holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: NH ELAP (2249).

120 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.pacelabs.com



Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2511801**Report Date:** 03/13/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2511801-01	045163-32KNOW-1	AIR	SOMERVILLE, MA	02/28/25 10:30	03/03/25
L2511801-02	045163-32KNOW-B	AIR	SOMERVILLE, MA	02/28/25 10:28	03/03/25

Project Name: TUFTS ST

Lab Number: L2511801

Project Number: 045163

Report Date: 03/13/25

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	NO
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES
A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	YES
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	NO
For any questions answered "No", please refer to the case narrative section on the following page(s).		

Please note that sample matrix information is located in the Sample Results section of this report.



Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2511801
Report Date: 03/13/25

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Pace Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Pace's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Pace Project Manager and made arrangements for Pace to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2511801
Report Date: 03/13/25

Case Narrative (continued)

MCP Related Narratives

Canisters were released from the laboratory on February 13, 2025. The canister certification data is provided as an addendum.

MCP Volatile Organics in Air

In reference to questions E b/I:

All samples were analyzed for a subset of the MCP compounds per the Chain of Custody.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Christopher J. Anderson

Title: Technical Director/Representative

Date: 03/13/25

QC OUTLIER SUMMARY REPORT

Project Name: TUFTS ST**Lab Number:** L2511801**Project Number:** 045163**Report Date:** 03/13/25

Method	Client ID (Native ID)	Lab ID	Parameter	QC Type	Recovery/RPD (%)	QC Limits (%)	Associated Samples	Data Quality Assessment
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There are no QC Outliers associated with this report.

AIR

Project Name: TUFTS ST**Lab Number:** L2511801**Project Number:** 045163**Report Date:** 03/13/25**SAMPLE RESULTS**

Lab ID: L2511801-01
 Client ID: 045163-32KNOW-1
 Sample Location: SOMERVILLE, MA

Date Collected: 02/28/25 10:30
 Date Received: 03/03/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/11/25 23:39
 Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.024	0.020	--	0.163	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	80		60-140
bromochloromethane	83		60-140
chlorobenzene-d5	86		60-140



Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2511801**Report Date:** 03/13/25**SAMPLE RESULTS**

Lab ID: L2511801-02
 Client ID: 045163-32KNOW-B
 Sample Location: SOMERVILLE, MA

Date Collected: 02/28/25 10:28
 Date Received: 03/03/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/12/25 00:18
 Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.020	0.020	--	0.136	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	78		60-140
bromochloromethane	82		60-140
chlorobenzene-d5	83		60-140



Project Name: TUFTS ST

Lab Number: L2511801

Project Number: 045163

Report Date: 03/13/25

Method Blank Analysis Batch Quality Control

Analytical Method: 101,TO-15-SIM

Analytical Date: 03/11/25 16:00

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab for sample(s): 01-02 Batch: WG2039279-4								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1



Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS ST

Project Number: 045163

Lab Number: L2511801

Report Date: 03/13/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics in Air by SIM - Mansfield Air Lab Associated sample(s): 01-02 Batch: WG2039279-3								
Vinyl chloride	123		-		70-130	-		
1,1-Dichloroethene	97		-		70-130	-		
trans-1,2-Dichloroethene	98		-		70-130	-		
1,1-Dichloroethane	91		-		70-130	-		
cis-1,2-Dichloroethene	89		-		70-130	-		
1,1,1-Trichloroethane	92		-		70-130	-		
Trichloroethene	88		-		70-130	-		
1,1,2-Trichloroethane	83		-		70-130	-		
Tetrachloroethene	100		-		70-130	-		
1,1,2,2-Tetrachloroethane	94		-		70-130	-		

Lab Duplicate Analysis

Batch Quality Control

Project Name: TUFTS ST

Project Number: 045163

Lab Number: L2511801

Report Date: 03/13/25

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
MCP Volatile Organics in Air by SIM - Mansfield Air Lab Associated sample(s): 01-02 QC Batch ID: WG2039279-5 QC Sample: L2511801-02 Client ID: 045163-32KNOW-B						
Vinyl chloride	ND	ND	ppbV	NC		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1-Dichloroethane	ND	ND	ppbV	NC		25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1,1-Trichloroethane	ND	ND	ppbV	NC		25
Trichloroethene	ND	ND	ppbV	NC		25
1,1,2-Trichloroethane	ND	ND	ppbV	NC		25
Tetrachloroethene	0.020	ND	ppbV	NC		25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC		25

Project Name: TUFTS ST

Project Number: 045163

Serial_No: 03132515:12
Lab Number: L2511801

Report Date: 03/13/25

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt	Flow Controller Leak Chk	Flow Out mL/min	Flow In	% RPD
L2511801-01	045163-32KNOW-1	01284	Flow 5	02/13/25	505312		-	-	-	Pass	3.0	3.3	10
L2511801-01	045163-32KNOW-1	2932	6.0L Can	02/13/25	505312	L2507631-01	Pass	-30.2	-9.6	-	-	-	-
L2511801-02	045163-32KNOW-B	0240	Flow 5	02/13/25	505312		-	-	-	Pass	3.0	3.1	3
L2511801-02	045163-32KNOW-B	1850	6.0L Can	02/13/25	505312	L2507631-01	Pass	-30.2	-7.7	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507631
Report Date: 03/13/25

Air Canister Certification Results

Lab ID: L2507631-01
Client ID: CAN 5168 SHELF 51
Sample Location:

Date Collected: 02/11/25 12:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 02/12/25 03:24
Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	1.00	--	ND	2.46	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507631
Report Date: 03/13/25

Air Canister Certification Results

Lab ID: L2507631-01
Client ID: CAN 5168 SHELF 51
Sample Location:

Date Collected: 02/11/25 12:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507631
Report Date: 03/13/25

Air Canister Certification Results

Lab ID: L2507631-01
Client ID: CAN 5168 SHELF 51
Sample Location:

Date Collected: 02/11/25 12:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507631
Report Date: 03/13/25

Air Canister Certification Results

Lab ID: L2507631-01
Client ID: CAN 5168 SHELF 51
Sample Location:

Date Collected: 02/11/25 12:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	0.996	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2507631**Project Number:** CANISTER QC BAT**Report Date:** 03/13/25**Air Canister Certification Results**

Lab ID: L2507631-01

Date Collected: 02/11/25 12:00

Client ID: CAN 5168 SHELF 51

Date Received: 02/11/25

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	89		60-140
Bromochloromethane	96		60-140
chlorobenzene-d5	92		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507631
Report Date: 03/13/25

Air Canister Certification Results

Lab ID: L2507631-01
Client ID: CAN 5168 SHELF 51
Sample Location:

Date Collected: 02/11/25 12:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 02/12/25 03:24
Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507631
Report Date: 03/13/25

Air Canister Certification Results

Lab ID: L2507631-01
Client ID: CAN 5168 SHELF 51
Sample Location:

Date Collected: 02/11/25 12:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507631
Report Date: 03/13/25

Air Canister Certification Results

Lab ID: L2507631-01
Client ID: CAN 5168 SHELF 51
Sample Location:

Date Collected: 02/11/25 12:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	89		60-140
bromochloromethane	97		60-140
chlorobenzene-d5	92		60-140



Project Name: TUFTS ST
Project Number: 045163

Serial_No:03132515:12
Lab Number: L2511801
Report Date: 03/13/25

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
NA	Present/Intact

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2511801-01A	Canister - 6L (Batch Certified)	NA	NA			Y	Absent		MCP-TO15-SIM(30)
L2511801-02A	Canister - 6L (Batch Certified)	NA	NA			Y	Absent		MCP-TO15-SIM(30)

Project Name: TUFTS ST**Lab Number:** L2511801**Project Number:** 045163**Report Date:** 03/13/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report

Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2511801
Report Date: 03/13/25

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

Report Format: Data Usability Report



Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2511801
Report Date: 03/13/25

Data Qualifiers

- ND** - Not detected at the reporting limit (RL) for the sample.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: TUFTS ST**Lab Number:** L2511801**Project Number:** 045163**Report Date:** 03/13/25

REFERENCES

- 101 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air (EPA/625/R-96/010b:January 1999) with QC Requirements & Performance Standards for the Analysis of TO-15 under the Massachusetts Contingency Plan, WSC-CAM-IXB, July 2010.

LIMITATION OF LIABILITIES

Pace Analytical Services performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Pace Analytical Services shall be to re-perform the work at it's own expense. In no event shall Pace Analytical Services be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Pace Analytical Services.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Pace Analytical Services LLCFacility: **Northeast**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

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Certification Information**The following analytes are not included in our Primary NELAP Scope of Accreditation:****Westborough Facility – 8 Walkup Dr. Westborough, MA 01581****EPA 624.1:** m/p-xylene, o-xylene, Naphthalene**EPA 625.1:** alpha-Terpineol**EPA 8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****SM 2540D:** TSS.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.**MADEP-APH.****Nonpotable Water:** EPA RSK-175 Dissolved Gases**Biological Tissue Matrix:** EPA 3050B**Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048****EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Nonpotable Water: EPA RSK-175 Dissolved Gases**The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:****Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)****The following analytes are included in our Massachusetts DEP Scope of Accreditation****Westborough Facility – 8 Walkup Dr. Westborough, MA 01581****Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables).**Microbiology:** SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.** **EPA 522, EPA 537.1.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1 Hg.****SM2340B**

Pace Analytical Services LLCID No.:**17873**Facility: **Northeast**

Revision 27

Department: **Quality Assurance**

Published Date: 01/24/2025

Title: **Certificate/Approval Program Summary**

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Certification IDs:**Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**

CT PH-0826, IL 200077, IN C-MA-03, KY JY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 3090, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048

ANAB/DoD L2474, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

For a complete listing of analytes and methods, please contact your Project Manager.

B. Mendon AAL 7/31/15 1930 10/1 B. Mendon AAL 7/31/15 2105 L.L. of Hts 3/7/25 2000

Indoor Air Sampling Analyte List

- 1,1-Dichloroethane
- 1,1-Dichloroethylene
- trans-1,2-Dichloroethylene
- cis-1,2-Dichloroethylene
- 1,1,1-Trichloroethane
- 1,1,2,2-Tetrachloroethane
- 1,1,2-Trichloroethane
- Tetrachloroethylene
- Trichloroethylene
- Vinyl Chloride



ANALYTICAL REPORT

Lab Number:	L2513253
Client:	GEI Consultants 400 Unicorn Park Drive Woburn, MA 01801
ATTN:	Chris Coner
Phone:	(781) 721-4000
Project Name:	TUFTS ST
Project Number:	045163
Report Date:	03/26/25

The original project report/data package is held by Pace Analytical Services. This report/data package is paginated and should be reproduced only in its entirety. Pace Analytical Services holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: NH ELAP (2249).

120 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.pacelabs.com



Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2513253
Report Date: 03/26/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2513253-01	045163-17KNOW-1	AIR	SOMERVILLE, MA	03/06/25 10:04	03/07/25
L2513253-02	045163-17KNOW-B	AIR	SOMERVILLE, MA	03/06/25 10:07	03/07/25

Project Name: TUFTS ST

Lab Number: L2513253

Project Number: 045163

Report Date: 03/26/25

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	NO
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES
A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	YES
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	NO
For any questions answered "No", please refer to the case narrative section on the following page(s).		

Please note that sample matrix information is located in the Sample Results section of this report.



Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2513253
Report Date: 03/26/25

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Pace Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Pace's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Pace Project Manager and made arrangements for Pace to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2513253
Report Date: 03/26/25

Case Narrative (continued)

MCP Related Narratives

Canisters were released from the laboratory on February 13, 2025. The canister certification data is provided as an addendum.

MCP Volatile Organics in Air

In reference to questions E b/I:

All samples were analyzed for a subset of the MCP compounds per the Chain of Custody.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Christopher J. Anderson

Title: Technical Director/Representative

Date: 03/26/25

QC OUTLIER SUMMARY REPORT

Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2513253**Report Date:** 03/26/25

Method	Client ID (Native ID)	Lab ID	Parameter	QC Type	Recovery/RPD (%)	QC Limits (%)	Associated Samples	Data Quality Assessment
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There are no QC Outliers associated with this report.

AIR

Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2513253**Report Date:** 03/26/25**SAMPLE RESULTS**

Lab ID: L2513253-01
 Client ID: 045163-17KNOW-1
 Sample Location: SOMERVILLE, MA

Date Collected: 03/06/25 10:04
 Date Received: 03/07/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/25/25 23:26
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.024	0.020	--	0.163	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	83		60-140
bromochloromethane	83		60-140
chlorobenzene-d5	82		60-140



Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2513253**Report Date:** 03/26/25**SAMPLE RESULTS**

Lab ID: L2513253-02
 Client ID: 045163-17KNOW-B
 Sample Location: SOMERVILLE, MA

Date Collected: 03/06/25 10:07
 Date Received: 03/07/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 03/26/25 00:05
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.030	0.020	--	0.203	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	84		60-140
bromochloromethane	83		60-140
chlorobenzene-d5	85		60-140



Project Name: TUFTS ST

Lab Number: L2513253

Project Number: 045163

Report Date: 03/26/25

Method Blank Analysis Batch Quality Control

Analytical Method: 101,TO-15-SIM

Analytical Date: 03/25/25 16:21

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab for sample(s): 01-02 Batch: WG2045115-4								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1



Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS ST

Project Number: 045163

Lab Number: L2513253

Report Date: 03/26/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics in Air by SIM - Mansfield Air Lab Associated sample(s): 01-02 Batch: WG2045115-3								
Vinyl chloride	71		-		70-130	-		
1,1-Dichloroethene	77		-		70-130	-		
trans-1,2-Dichloroethene	84		-		70-130	-		
1,1-Dichloroethane	74		-		70-130	-		
cis-1,2-Dichloroethene	74		-		70-130	-		
1,1,1-Trichloroethane	101		-		70-130	-		
Trichloroethene	90		-		70-130	-		
1,1,2-Trichloroethane	91		-		70-130	-		
Tetrachloroethene	92		-		70-130	-		
1,1,2,2-Tetrachloroethane	83		-		70-130	-		

Project Name: TUFTS ST

Project Number: 045163

Serial_No:03262518:11
Lab Number: L2513253

Report Date: 03/26/25

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt	Flow Controller Leak Chk	Flow Out mL/min	Flow In	% RPD
L2513253-01	045163-17KNOW-1	01101	Flow 1	02/13/25	505312		-	-	-	Pass	3.0	3.3	10
L2513253-01	045163-17KNOW-1	4334	6.0L Can	02/13/25	505312	L2507313-06	Pass	-29.7	-6.0	-	-	-	-
L2513253-02	045163-17KNOW-B	0266	Flow 5	02/13/25	505312		-	-	-	Pass	3.0	3.1	3
L2513253-02	045163-17KNOW-B	2770	6.0L Can	02/13/25	505312	L2507313-08	Pass	-29.6	-9.5	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507313
Report Date: 03/26/25

Air Canister Certification Results

Lab ID: L2507313-06
Client ID: CAN 2698 SHELF 41
Sample Location:

Date Collected: 02/11/25 10:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 02/12/25 00:14
Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	1.00	--	ND	2.46	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507313
Report Date: 03/26/25

Air Canister Certification Results

Lab ID: L2507313-06
Client ID: CAN 2698 SHELF 41
Sample Location:

Date Collected: 02/11/25 10:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507313
Report Date: 03/26/25

Air Canister Certification Results

Lab ID: L2507313-06
Client ID: CAN 2698 SHELF 41
Sample Location:

Date Collected: 02/11/25 10:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507313
Report Date: 03/26/25

Air Canister Certification Results

Lab ID: L2507313-06
Client ID: CAN 2698 SHELF 41
Sample Location:

Date Collected: 02/11/25 10:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	0.996	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2507313**Project Number:** CANISTER QC BAT**Report Date:** 03/26/25**Air Canister Certification Results**

Lab ID: L2507313-06

Date Collected: 02/11/25 10:00

Client ID: CAN 2698 SHELF 41

Date Received: 02/11/25

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				
No Tentatively Identified Compounds				

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	89		60-140
Bromochloromethane	95		60-140
chlorobenzene-d5	92		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507313
Report Date: 03/26/25

Air Canister Certification Results

Lab ID: L2507313-06
Client ID: CAN 2698 SHELF 41
Sample Location:

Date Collected: 02/11/25 10:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 02/12/25 00:14
Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507313
Report Date: 03/26/25

Air Canister Certification Results

Lab ID: L2507313-06
Client ID: CAN 2698 SHELF 41
Sample Location:

Date Collected: 02/11/25 10:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507313
Report Date: 03/26/25

Air Canister Certification Results

Lab ID: L2507313-06
Client ID: CAN 2698 SHELF 41
Sample Location:

Date Collected: 02/11/25 10:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	89		60-140
bromochloromethane	98		60-140
chlorobenzene-d5	92		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507313
Report Date: 03/26/25

Air Canister Certification Results

Lab ID: L2507313-08
Client ID: CAN 2465 SHELF 43
Sample Location:

Date Collected: 02/11/25 10:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 02/12/25 01:30
Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	1.00	--	ND	2.46	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507313
Report Date: 03/26/25

Air Canister Certification Results

Lab ID: L2507313-08
Client ID: CAN 2465 SHELF 43
Sample Location:

Date Collected: 02/11/25 10:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507313
Report Date: 03/26/25

Air Canister Certification Results

Lab ID: L2507313-08
Client ID: CAN 2465 SHELF 43
Sample Location:

Date Collected: 02/11/25 10:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507313
Report Date: 03/26/25

Air Canister Certification Results

Lab ID: L2507313-08
Client ID: CAN 2465 SHELF 43
Sample Location:

Date Collected: 02/11/25 10:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	0.996	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

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Air Canister Certification Results

Lab ID: L2507313-08
 Client ID: CAN 2465 SHELF 43
 Sample Location:

Date Collected: 02/11/25 10:00
 Date Received: 02/11/25
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				
No Tentatively Identified Compounds				

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	89		60-140
Bromochloromethane	96		60-140
chlorobenzene-d5	92		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507313
Report Date: 03/26/25

Air Canister Certification Results

Lab ID: L2507313-08
Client ID: CAN 2465 SHELF 43
Sample Location:

Date Collected: 02/11/25 10:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 02/12/25 01:30
Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507313
Report Date: 03/26/25

Air Canister Certification Results

Lab ID: L2507313-08
Client ID: CAN 2465 SHELF 43
Sample Location:

Date Collected: 02/11/25 10:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2507313**Project Number:** CANISTER QC BAT**Report Date:** 03/26/25**Air Canister Certification Results**

Lab ID: L2507313-08

Date Collected: 02/11/25 10:00

Client ID: CAN 2465 SHELF 43

Date Received: 02/11/25

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	89		60-140
bromochloromethane	97		60-140
chlorobenzene-d5	93		60-140



Project Name: TUFTS ST
Project Number: 045163

Serial_No:03262518:11
Lab Number: L2513253
Report Date: 03/26/25

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
NA	Present/Intact

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2513253-01A	Canister - 6L (Batch Certified)	NA	NA			Y	Absent		MCP-TO15-SIM(30)
L2513253-02A	Canister - 6L (Batch Certified)	NA	NA			Y	Absent		MCP-TO15-SIM(30)

Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2513253
Report Date: 03/26/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report



Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2513253
Report Date: 03/26/25

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

Report Format: Data Usability Report



Project Name: TUFTS ST**Lab Number:** L2513253**Project Number:** 045163**Report Date:** 03/26/25**Data Qualifiers**

- ND** - Not detected at the reporting limit (RL) for the sample.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: TUFTS ST**Lab Number:** L2513253**Project Number:** 045163**Report Date:** 03/26/25

REFERENCES

- 101 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air (EPA/625/R-96/010b:January 1999) with QC Requirements & Performance Standards for the Analysis of TO-15 under the Massachusetts Contingency Plan, WSC-CAM-IXB, July 2010.

LIMITATION OF LIABILITIES

Pace Analytical Services performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Pace Analytical Services shall be to re-perform the work at it's own expense. In no event shall Pace Analytical Services be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Pace Analytical Services.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Pace Analytical Services LLCFacility: **Northeast**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

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Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**EPA 624.1:** m/p-xylene, o-xylene, Naphthalene**EPA 625.1:** alpha-Terpineol**EPA 8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****SM 2540D:** TSS.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

MADEP-APH.**Nonpotable Water:** EPA RSK-175 Dissolved Gases**Biological Tissue Matrix:** EPA 3050B**Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048****EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048**Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)**

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables).**Microbiology:** SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.** **EPA 522, EPA 537.1.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1 Hg.****SM2340B**

Pace Analytical Services LLCID No.:**17873**Facility: **Northeast**

Revision 27

Department: **Quality Assurance**

Published Date: 01/24/2025

Title: **Certificate/Approval Program Summary**

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Certification IDs:**Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**

CT PH-0826, IL 200077, IN C-MA-03, KY JY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 3090, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048

ANAB/DoD L2474, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

For a complete listing of analytes and methods, please contact your Project Manager.



ANALYTICAL REPORT

Lab Number:	L2516977
Client:	GEI Consultants 400 Unicorn Park Drive Woburn, MA 01801
ATTN:	Chris Coner
Phone:	(781) 721-4000
Project Name:	TUFTS ST
Project Number:	045163
Report Date:	04/01/25

The original project report/data package is held by Pace Analytical Services. This report/data package is paginated and should be reproduced only in its entirety. Pace Analytical Services holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: NH ELAP (2249).

120 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.pacelabs.com



Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2516977
Report Date: 04/01/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2516977-01	045163-10MORT-1	AIR	SOMERVILLE,MA	03/18/25 09:33	03/20/25
L2516977-02	045163-10MORT-B	AIR	SOMERVILLE,MA	03/18/25 09:38	03/20/25
L2516977-03	045163-10MORT-SV5	SOIL_VAPOR	SOMERVILLE,MA	03/18/25 11:05	03/20/25
L2516977-04	045163-10MORT-SV6	SOIL_VAPOR	SOMERVILLE,MA	03/18/25 11:00	03/20/25

Project Name: TUFTS ST

Lab Number: L2516977

Project Number: 045163

Report Date: 04/01/25

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	NO
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES
A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	YES
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	NO
For any questions answered "No", please refer to the case narrative section on the following page(s).		

Please note that sample matrix information is located in the Sample Results section of this report.



Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2516977
Report Date: 04/01/25

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Pace Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Pace's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Pace Project Manager and made arrangements for Pace to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2516977
Report Date: 04/01/25

Case Narrative (continued)

MCP Related Narratives

Canisters were released from the laboratory on March 14, 2025. The canister certification data is provided as an addendum.

MCP Volatile Organics in Air

In reference to questions E b/I:

All samples were analyzed for a subset of the MCP compounds per the Chain of Custody.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Christopher J. Anderson

Title: Technical Director/Representative

Date: 04/01/25

QC OUTLIER SUMMARY REPORT

Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2516977**Report Date:** 04/01/25

Method	Client ID (Native ID)	Lab ID	Parameter	QC Type	Recovery/RPD (%)	QC Limits (%)	Associated Samples	Data Quality Assessment
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There are no QC Outliers associated with this report.

AIR

Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2516977**Report Date:** 04/01/25**SAMPLE RESULTS**

Lab ID: L2516977-01
 Client ID: 045163-10MORT-1
 Sample Location: SOMERVILLE,MA

Date Collected: 03/18/25 09:33
 Date Received: 03/20/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 04/01/25 00:59
 Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	40.0	0.020	--	159	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.031	0.020	--	0.210	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	89		60-140
bromochloromethane	94		60-140
chlorobenzene-d5	92		60-140



Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2516977**Report Date:** 04/01/25**SAMPLE RESULTS**

Lab ID: L2516977-02
 Client ID: 045163-10MORT-B
 Sample Location: SOMERVILLE,MA

Date Collected: 03/18/25 09:38
 Date Received: 03/20/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 04/01/25 01:32
 Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	6.38	0.020	--	25.3	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	88		60-140
bromochloromethane	95		60-140
chlorobenzene-d5	93		60-140



Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2516977**Report Date:** 04/01/25**SAMPLE RESULTS**

Lab ID: L2516977-03
 Client ID: 045163-10MORT-SV5
 Sample Location: SOMERVILLE,MA

Date Collected: 03/18/25 11:05
 Date Received: 03/20/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil_Vapor
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 04/01/25 02:05
 Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	3.24	0.020	--	12.8	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.172	0.020	--	1.17	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	87		60-140
bromochloromethane	95		60-140
chlorobenzene-d5	93		60-140



Project Name: TUFTS ST**Lab Number:** L2516977**Project Number:** 045163**Report Date:** 04/01/25**SAMPLE RESULTS**

Lab ID: L2516977-04
 Client ID: 045163-10MORT-SV6
 Sample Location: SOMERVILLE,MA

Date Collected: 03/18/25 11:00
 Date Received: 03/20/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil_Vapor
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 04/01/25 02:36
 Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	3.48	0.020	--	13.8	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.853	0.020	--	5.78	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	88		60-140
bromochloromethane	95		60-140
chlorobenzene-d5	95		60-140



Project Name: TUFTS ST

Lab Number: L2516977

Project Number: 045163

Report Date: 04/01/25

Method Blank Analysis Batch Quality Control

Analytical Method: 101,TO-15-SIM

Analytical Date: 03/31/25 15:56

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab for sample(s): 01-04 Batch: WG2047630-4								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1



Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS ST

Project Number: 045163

Lab Number: L2516977

Report Date: 04/01/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics in Air by SIM - Mansfield Air Lab Associated sample(s): 01-04 Batch: WG2047630-3								
Vinyl chloride	101		-		70-130	-		
1,1-Dichloroethene	101		-		70-130	-		
trans-1,2-Dichloroethene	115		-		70-130	-		
1,1-Dichloroethane	100		-		70-130	-		
cis-1,2-Dichloroethene	96		-		70-130	-		
1,1,1-Trichloroethane	95		-		70-130	-		
Trichloroethene	97		-		70-130	-		
1,1,2-Trichloroethane	99		-		70-130	-		
Tetrachloroethene	104		-		70-130	-		
1,1,2,2-Tetrachloroethane	106		-		70-130	-		

Project Name: TUFTS ST

Project Number: 045163

Lab Number: Serial_No:04012517:10
L2516977

Report Date: 04/01/25

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt	Flow Controller Leak Chk	Flow Out mL/min	Flow In	% RPD
L2516977-01	045163-10MORT-1	02871	Flow 5	03/14/25	510081		-	-	-	Pass	3.0	3.1	3
L2516977-01	045163-10MORT-1	4250	6.0L Can	03/14/25	510081	L2513890-04	Pass	-29.5	-8.7	-	-	-	-
L2516977-02	045163-10MORT-B	02779	Flow 5	03/14/25	510081		-	-	-	Pass	3.0	3.3	10
L2516977-02	045163-10MORT-B	1778	6.0L Can	03/14/25	510081	L2513890-04	Pass	-29.4	-7.6	-	-	-	-
L2516977-03	045163-10MORT-SV5	02848	Flow 1	03/14/25	510081		-	-	-	Pass	36.3	35.6	2
L2516977-03	045163-10MORT-SV5	118	2.7L Can	03/14/25	510081	L2513198-06	Pass	-30.0	-3.4	-	-	-	-
L2516977-04	045163-10MORT-SV6	02040	Flow 1	03/14/25	510081		-	-	-	Pass	36.0	34.7	4
L2516977-04	045163-10MORT-SV6	484	2.7L Can	03/14/25	510081	L2513198-06	Pass	-29.6	-4.3	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2513198
Report Date: 04/01/25

Air Canister Certification Results

Lab ID: L2513198-06
Client ID: CAN 171 SHELF 19
Sample Location:

Date Collected: 03/08/25 13:00
Date Received: 03/08/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 03/08/25 20:56
Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	1.00	--	ND	2.46	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2513198
Report Date: 04/01/25

Air Canister Certification Results

Lab ID: L2513198-06
Client ID: CAN 171 SHELF 19
Sample Location:

Date Collected: 03/08/25 13:00
Date Received: 03/08/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2513198
Report Date: 04/01/25

Air Canister Certification Results

Lab ID: L2513198-06
Client ID: CAN 171 SHELF 19
Sample Location:

Date Collected: 03/08/25 13:00
Date Received: 03/08/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2513198
Report Date: 04/01/25

Air Canister Certification Results

Lab ID: L2513198-06
Client ID: CAN 171 SHELF 19
Sample Location:

Date Collected: 03/08/25 13:00
Date Received: 03/08/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	0.996	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2513198
Report Date: 04/01/25

Air Canister Certification Results

Lab ID: L2513198-06
 Client ID: CAN 171 SHELF 19
 Sample Location:

Date Collected: 03/08/25 13:00
 Date Received: 03/08/25
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				
No Tentatively Identified Compounds				

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	87		60-140
Bromochloromethane	95		60-140
chlorobenzene-d5	92		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2513198
Report Date: 04/01/25

Air Canister Certification Results

Lab ID: L2513198-06
Client ID: CAN 171 SHELF 19
Sample Location:

Date Collected: 03/08/25 13:00
Date Received: 03/08/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 03/08/25 20:56
Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2513198
Report Date: 04/01/25

Air Canister Certification Results

Lab ID: L2513198-06
Client ID: CAN 171 SHELF 19
Sample Location:

Date Collected: 03/08/25 13:00
Date Received: 03/08/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	0.041	0.020	--	0.278	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2513198
Report Date: 04/01/25

Air Canister Certification Results

Lab ID: L2513198-06
Client ID: CAN 171 SHELF 19
Sample Location:

Date Collected: 03/08/25 13:00
Date Received: 03/08/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	99		60-140
bromochloromethane	106		60-140
chlorobenzene-d5	108		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2513890
Report Date: 04/01/25

Air Canister Certification Results

Lab ID: L2513890-04
Client ID: CAN 3964 SHELF 36
Sample Location:

Date Collected: 03/11/25 18:00
Date Received: 03/12/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 03/13/25 00:51
Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	1.00	--	ND	2.46	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2513890
Report Date: 04/01/25

Air Canister Certification Results

Lab ID: L2513890-04
Client ID: CAN 3964 SHELF 36
Sample Location:

Date Collected: 03/11/25 18:00
Date Received: 03/12/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2513890**Project Number:** CANISTER QC BAT**Report Date:** 04/01/25**Air Canister Certification Results**

Lab ID: L2513890-04

Date Collected: 03/11/25 18:00

Client ID: CAN 3964 SHELF 36

Date Received: 03/12/25

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2513890
Report Date: 04/01/25

Air Canister Certification Results

Lab ID: L2513890-04
Client ID: CAN 3964 SHELF 36
Sample Location:

Date Collected: 03/11/25 18:00
Date Received: 03/12/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	0.996	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2513890
Report Date: 04/01/25

Air Canister Certification Results

Lab ID: L2513890-04
 Client ID: CAN 3964 SHELF 36
 Sample Location:

Date Collected: 03/11/25 18:00
 Date Received: 03/12/25
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				
No Tentatively Identified Compounds				

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	80		60-140
Bromochloromethane	89		60-140
chlorobenzene-d5	88		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2513890
Report Date: 04/01/25

Air Canister Certification Results

Lab ID: L2513890-04
Client ID: CAN 3964 SHELF 36
Sample Location:

Date Collected: 03/11/25 18:00
Date Received: 03/12/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 03/13/25 00:51
Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2513890
Report Date: 04/01/25

Air Canister Certification Results

Lab ID: L2513890-04
Client ID: CAN 3964 SHELF 36
Sample Location:

Date Collected: 03/11/25 18:00
Date Received: 03/12/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2513890**Project Number:** CANISTER QC BAT**Report Date:** 04/01/25**Air Canister Certification Results**

Lab ID: L2513890-04

Date Collected: 03/11/25 18:00

Client ID: CAN 3964 SHELF 36

Date Received: 03/12/25

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	82		60-140
bromochloromethane	92		60-140
chlorobenzene-d5	92		60-140



Project Name: TUFTS ST
Project Number: 045163

Serial_No:04012517:10
Lab Number: L2516977
Report Date: 04/01/25

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
NA	Present/Intact

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2516977-01A	Canister - 6L (Batch Certified)	NA	NA			Y	Absent		MCP-TO15-SIM(30)
L2516977-02A	Canister - 6L (Batch Certified)	NA	NA			Y	Absent		MCP-TO15-SIM(30)
L2516977-03A	Canister - 2.7L (Batch Certified)	NA	NA			Y	Absent		MCP-TO15-SIM(30)
L2516977-04A	Canister - 2.7L (Batch Certified)	NA	NA			Y	Absent		MCP-TO15-SIM(30)

Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2516977
Report Date: 04/01/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report



Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2516977
Report Date: 04/01/25

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

Report Format: Data Usability Report



Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2516977
Report Date: 04/01/25

Data Qualifiers

- ND** - Not detected at the reporting limit (RL) for the sample.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: TUFTS ST**Lab Number:** L2516977**Project Number:** 045163**Report Date:** 04/01/25

REFERENCES

- 101 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air (EPA/625/R-96/010b:January 1999) with QC Requirements & Performance Standards for the Analysis of TO-15 under the Massachusetts Contingency Plan, WSC-CAM-IXB, July 2010.

LIMITATION OF LIABILITIES

Pace Analytical Services performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Pace Analytical Services shall be to re-perform the work at it's own expense. In no event shall Pace Analytical Services be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Pace Analytical Services.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Pace Analytical Services LLCFacility: **Northeast**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

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Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**EPA 624.1:** m/p-xylene, o-xylene, Naphthalene**EPA 625.1:** alpha-Terpineol**EPA 8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****SM 2540D:** TSS.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

MADEP-APH.**Nonpotable Water:** EPA RSK-175 Dissolved Gases**Biological Tissue Matrix:** EPA 3050B**Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048****EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048**Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)**

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LCHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables).**Microbiology:** SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.****EPA 522, EPA 537.1.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1 Hg.****SM2340B**

Pace Analytical Services LLCID No.:**17873**Facility: **Northeast**

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Department: **Quality Assurance**

Published Date: 01/24/2025

Title: **Certificate/Approval Program Summary**

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Certification IDs:**Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**

CT PH-0826, IL 200077, IN C-MA-03, KY JY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 3090, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048

ANAB/DoD L2474, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

For a complete listing of analytes and methods, please contact your Project Manager.

Indoor Air Sampling Analyte List

- 1,1-Dichloroethane
- 1,1-Dichloroethylene
- trans-1,2-Dichloroethylene
- cis-1,2-Dichloroethylene
- 1,1,1-Trichloroethane
- 1,1,2,2-Tetrachloroethane
- 1,1,2-Trichloroethane
- Tetrachloroethylene
- Trichloroethylene
- Vinyl Chloride



ANALYTICAL REPORT

Lab Number:	L2519136
Client:	GEI Consultants 400 Unicorn Park Drive Woburn, MA 01801
ATTN:	Chris Coner
Phone:	(781) 721-4000
Project Name:	50 TUFTS STREET
Project Number:	045163
Report Date:	04/09/25

The original project report/data package is held by Pace Analytical Services. This report/data package is paginated and should be reproduced only in its entirety. Pace Analytical Services holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: NH ELAP (2249).

120 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.pacelabs.com



Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2519136
Report Date: 04/09/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2519136-01	045163-34KNOWL-F1	AIR	SOMERVILLE,MA	03/27/25 15:30	03/28/25
L2519136-02	045163-50TUFT-INFL	SOIL_VAPOR	SOMERVILLE,MA	03/27/25 16:45	03/28/25

Project Name: 50 TUFTS STREET

Lab Number: L2519136

Project Number: 045163

Report Date: 04/09/25

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	NO
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES
A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	YES
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	NO
For any questions answered "No", please refer to the case narrative section on the following page(s).		

Please note that sample matrix information is located in the Sample Results section of this report.



Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2519136
Report Date: 04/09/25

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Pace Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Pace's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Pace Project Manager and made arrangements for Pace to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2519136
Report Date: 04/09/25

Case Narrative (continued)

MCP Related Narratives

Canisters were released from the laboratory on March 24, 2025. The canister certification data is provided as an addendum.

MCP Volatile Organics in Air

In reference to questions E b/l:

All samples were analyzed for a subset of the MCP compounds per the Chain of Custody.

L2519136-02D: The sample was re-analyzed on dilution in order to quantitate the results within the calibration range. The result(s) should be considered estimated, and are qualified with an E flag, for any compound(s) that exceeded the calibration range in the initial analysis. The re-analysis was performed only for the compound(s) that exceeded the calibration range.

L2519136-02D2: The sample has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Christopher J. Anderson

Title: Technical Director/Representative

Date: 04/09/25

QC OUTLIER SUMMARY REPORT

Project Name: 50 TUFTS STREET**Project Number:** 045163**Lab Number:** L2519136**Report Date:** 04/09/25

Method	Client ID (Native ID)	Lab ID	Parameter	QC Type	Recovery/RPD (%)	QC Limits (%)	Associated Samples	Data Quality Assessment
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There are no QC Outliers associated with this report.

AIR

Project Name: 50 TUFTS STREET**Project Number:** 045163**Lab Number:** L2519136**Report Date:** 04/09/25**SAMPLE RESULTS**

Lab ID: L2519136-01
 Client ID: 045163-34KNOWL-F1
 Sample Location: SOMERVILLE,MA

Date Collected: 03/27/25 15:30
 Date Received: 03/28/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 04/09/25 02:57
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	0.032	0.020	--	0.127	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.024	0.020	--	0.163	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	84		60-140
bromochloromethane	88		60-140
chlorobenzene-d5	85		60-140



Project Name: 50 TUFTS STREET**Project Number:** 045163**Lab Number:** L2519136**Report Date:** 04/09/25**SAMPLE RESULTS**

Lab ID: L2519136-02 D
 Client ID: 045163-50TUFT-INFL
 Sample Location: SOMERVILLE,MA

Date Collected: 03/27/25 16:45
 Date Received: 03/28/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil_Vapor
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 04/09/25 06:10
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.071	--	ND	0.183	--		3.571
1,1-Dichloroethene	0.157	0.071	--	0.622	0.283	--		3.571
trans-1,2-Dichloroethene	ND	0.071	--	ND	0.283	--		3.571
1,1-Dichloroethane	0.075	0.071	--	0.304	0.289	--		3.571
cis-1,2-Dichloroethene	0.171	0.071	--	0.678	0.283	--		3.571
1,1,1-Trichloroethane	6.74	0.071	--	36.8	0.390	--		3.571
Trichloroethene	3.91	0.071	--	21.0	0.384	--		3.571
1,1,2-Trichloroethane	ND	0.071	--	ND	0.390	--		3.571
Tetrachloroethene	193	0.071	--	1310	0.484	--	E	3.571
1,1,2,2-Tetrachloroethane	ND	0.071	--	ND	0.490	--		3.571

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	88		60-140
bromochloromethane	93		60-140
chlorobenzene-d5	88		60-140



Project Name: 50 TUFTS STREET**Lab Number:** L2519136**Project Number:** 045163**Report Date:** 04/09/25**SAMPLE RESULTS**

Lab ID: L2519136-02 D2
 Client ID: 045163-50TUFT-INFL
 Sample Location: SOMERVILLE,MA

Date Collected: 03/27/25 16:45
 Date Received: 03/28/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil_Vapor
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 04/09/25 07:36
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Tetrachloroethene	168	0.200	--	1140	1.36	--		10

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	87		60-140
bromochloromethane	93		60-140
chlorobenzene-d5	88		60-140



Project Name: 50 TUFTS STREET

Lab Number: L2519136

Project Number: 045163

Report Date: 04/09/25

Method Blank Analysis Batch Quality Control

Analytical Method: 101,TO-15-SIM

Analytical Date: 04/08/25 22:33

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab for sample(s): 01-02 Batch: WG2051258-4								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1



Lab Control Sample Analysis **Batch Quality Control**

Project Name: 50 TUFTS STREET

Project Number: 045163

Lab Number: L2519136

Report Date: 04/09/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics in Air by SIM - Mansfield Air Lab Associated sample(s): 01-02 Batch: WG2051258-3								
Vinyl chloride	94		-		70-130	-		
1,1-Dichloroethene	116		-		70-130	-		
trans-1,2-Dichloroethene	101		-		70-130	-		
1,1-Dichloroethane	92		-		70-130	-		
cis-1,2-Dichloroethene	92		-		70-130	-		
1,1,1-Trichloroethane	114		-		70-130	-		
Trichloroethene	103		-		70-130	-		
1,1,2-Trichloroethane	105		-		70-130	-		
Tetrachloroethene	109		-		70-130	-		
1,1,2,2-Tetrachloroethane	99		-		70-130	-		

Project Name: 50 TUFTS STREET

Project Number: 045163

Serial_No: 04092518:31
Lab Number: L2519136

Report Date: 04/09/25

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt	Flow Controller Leak Chk	Flow Out mL/min	Flow In	% RPD
L2519136-01	045163-34KNOWL-F1	0474	Flow 5	03/24/25	510940		-	-	-	Pass	3.0	3.5	15
L2519136-01	045163-34KNOWL-F1	5409	6.0L Can	03/24/25	510940	L2515871-10	Pass	-28.9	-9.3	-	-	-	-
L2519136-02	045163-50TUFT-INFL	02128	Flow 2	03/24/25	510940		-	-	-	Pass	36.0	38.4	6
L2519136-02	045163-50TUFT-INFL	3196	2.7L Can	03/24/25	510940	L2515871-04	Pass	-28.9	-3.0	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2515871
Report Date: 04/09/25

Air Canister Certification Results

Lab ID: L2515871-04
Client ID: CAN 500 SHELF 16
Sample Location:

Date Collected: 03/19/25 12:00
Date Received: 03/19/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 03/21/25 21:34
Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	1.00	--	ND	2.46	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2515871
Report Date: 04/09/25

Air Canister Certification Results

Lab ID: L2515871-04
Client ID: CAN 500 SHELF 16
Sample Location:

Date Collected: 03/19/25 12:00
Date Received: 03/19/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2515871
Report Date: 04/09/25

Air Canister Certification Results

Lab ID: L2515871-04
Client ID: CAN 500 SHELF 16
Sample Location:

Date Collected: 03/19/25 12:00
Date Received: 03/19/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2515871**Project Number:** CANISTER QC BAT**Report Date:** 04/09/25**Air Canister Certification Results**

Lab ID: L2515871-04

Date Collected: 03/19/25 12:00

Client ID: CAN 500 SHELF 16

Date Received: 03/19/25

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	0.996	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2515871**Project Number:** CANISTER QC BAT**Report Date:** 04/09/25**Air Canister Certification Results**

Lab ID: L2515871-04

Date Collected: 03/19/25 12:00

Client ID: CAN 500 SHELF 16

Date Received: 03/19/25

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				
No Tentatively Identified Compounds				

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	93		60-140
Bromochloromethane	98		60-140
chlorobenzene-d5	98		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2515871
Report Date: 04/09/25

Air Canister Certification Results

Lab ID: L2515871-04
Client ID: CAN 500 SHELF 16
Sample Location:

Date Collected: 03/19/25 12:00
Date Received: 03/19/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 03/21/25 21:34
Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2515871
Report Date: 04/09/25

Air Canister Certification Results

Lab ID: L2515871-04
Client ID: CAN 500 SHELF 16
Sample Location:

Date Collected: 03/19/25 12:00
Date Received: 03/19/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2515871**Project Number:** CANISTER QC BAT**Report Date:** 04/09/25**Air Canister Certification Results**

Lab ID: L2515871-04

Date Collected: 03/19/25 12:00

Client ID: CAN 500 SHELF 16

Date Received: 03/19/25

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	91		60-140
bromochloromethane	98		60-140
chlorobenzene-d5	100		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2515871
Report Date: 04/09/25

Air Canister Certification Results

Lab ID: L2515871-10
Client ID: CAN 647 SHELF 53
Sample Location:

Date Collected: 03/19/25 15:00
Date Received: 03/19/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 03/20/25 09:10
Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	1.00	--	ND	2.46	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2515871
Report Date: 04/09/25

Air Canister Certification Results

Lab ID: L2515871-10
Client ID: CAN 647 SHELF 53
Sample Location:

Date Collected: 03/19/25 15:00
Date Received: 03/19/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2515871
Report Date: 04/09/25

Air Canister Certification Results

Lab ID: L2515871-10
Client ID: CAN 647 SHELF 53
Sample Location:

Date Collected: 03/19/25 15:00
Date Received: 03/19/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2515871
Report Date: 04/09/25

Air Canister Certification Results

Lab ID: L2515871-10
Client ID: CAN 647 SHELF 53
Sample Location:

Date Collected: 03/19/25 15:00
Date Received: 03/19/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	0.996	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2515871**Project Number:** CANISTER QC BAT**Report Date:** 04/09/25**Air Canister Certification Results**

Lab ID: L2515871-10

Date Collected: 03/19/25 15:00

Client ID: CAN 647 SHELF 53

Date Received: 03/19/25

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	87		60-140
Bromochloromethane	95		60-140
chlorobenzene-d5	90		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2515871
Report Date: 04/09/25

Air Canister Certification Results

Lab ID: L2515871-10
Client ID: CAN 647 SHELF 53
Sample Location:

Date Collected: 03/19/25 15:00
Date Received: 03/19/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 03/20/25 09:10
Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2515871
Report Date: 04/09/25

Air Canister Certification Results

Lab ID: L2515871-10
Client ID: CAN 647 SHELF 53
Sample Location:

Date Collected: 03/19/25 15:00
Date Received: 03/19/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2515871**Project Number:** CANISTER QC BAT**Report Date:** 04/09/25**Air Canister Certification Results**

Lab ID: L2515871-10

Date Collected: 03/19/25 15:00

Client ID: CAN 647 SHELF 53

Date Received: 03/19/25

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	90		60-140
bromochloromethane	97		60-140
chlorobenzene-d5	93		60-140



Project Name: 50 TUFTS STREET**Lab Number:** L2519136**Project Number:** 045163**Report Date:** 04/09/25**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information**Cooler** **Custody Seal**

NA Present/Intact

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2519136-01A	Canister - 6L (Batch Certified)	NA	NA			Y	Absent		MCP-TO15-SIM(30)
L2519136-02A	Canister - 2.7L (Batch Certified)	NA	NA			Y	Absent		MCP-TO15-SIM(30)

Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2519136
Report Date: 04/09/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report



Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2519136
Report Date: 04/09/25

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

Report Format: Data Usability Report



Project Name: 50 TUFTS STREET
Project Number: 045163

Lab Number: L2519136
Report Date: 04/09/25

Data Qualifiers

- ND** - Not detected at the reporting limit (RL) for the sample.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: 50 TUFTS STREET**Lab Number:** L2519136**Project Number:** 045163**Report Date:** 04/09/25

REFERENCES

- 101 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air (EPA/625/R-96/010b:January 1999) with QC Requirements & Performance Standards for the Analysis of TO-15 under the Massachusetts Contingency Plan, WSC-CAM-IXB, July 2010.

LIMITATION OF LIABILITIES

Pace Analytical Services performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Pace Analytical Services shall be to re-perform the work at it's own expense. In no event shall Pace Analytical Services be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Pace Analytical Services.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Pace Analytical Services LLCFacility: **Northeast**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

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Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**EPA 624.1:** m/p-xylene, o-xylene, Naphthalene**EPA 625.1:** alpha-Terpineol**EPA 8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****SM 2540D:** TSS.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

MADEP-APH.**Nonpotable Water:** EPA RSK-175 Dissolved Gases**Biological Tissue Matrix:** EPA 3050B**Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048****EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048**Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)**

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LCHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables).**Microbiology:** SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.** **EPA 522, EPA 537.1.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1 Hg.****SM2340B**

Pace Analytical Services LLCID No.: **17873**Facility: **Northeast**

Revision 27

Department: **Quality Assurance**

Published Date: 01/24/2025

Title: **Certificate/Approval Program Summary**

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Certification IDs:**Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**

CT PH-0826, IL 200077, IN C-MA-03, KY JY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 3090, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048

ANAB/DoD L2474, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

For a complete listing of analytes and methods, please contact your Project Manager.



ANALYTICAL REPORT

Lab Number:	L2522887
Client:	GEI Consultants 400 Unicorn Park Drive Woburn, MA 01801
ATTN:	Chris Coner
Phone:	(781) 721-4000
Project Name:	TUFTS ST.
Project Number:	045163
Report Date:	04/25/25

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Certifications & Approvals: NH ELAP (2249).

120 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.pacelabs.com



Project Name: TUFTS ST.
Project Number: 045163

Lab Number: L2522887
Report Date: 04/25/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2522887-01	045163-11MORT-1	AIR	SOMERVILLE, MA	04/08/25 09:11	04/09/25
L2522887-02	045163-11MORT-B	AIR	SOMERVILLE, MA	04/08/25 09:12	04/09/25

Project Name: TUFTS ST.

Lab Number: L2522887

Project Number: 045163

Report Date: 04/25/25

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	NO
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES
A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	YES
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	NO
For any questions answered "No", please refer to the case narrative section on the following page(s).		

Please note that sample matrix information is located in the Sample Results section of this report.



Project Name: TUFTS ST.
Project Number: 045163

Lab Number: L2522887
Report Date: 04/25/25

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Pace Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Pace's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Pace Project Manager and made arrangements for Pace to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: TUFTS ST.
Project Number: 045163

Lab Number: L2522887
Report Date: 04/25/25

Case Narrative (continued)

MCP Related Narratives

Canisters were released from the laboratory on February 13, 2025. The canister certification data is provided as an addendum.

MCP Volatile Organics in Air

In reference to questions E b/I:

All samples were analyzed for a subset of the MCP compounds per the Chain of Custody.

Sample Receipt

L2522887-02: The sample has an RPD for the pre- and post-flow controller calibration check (29% RPD) outside of the control limit of 20%. The final pressure of the associated canister recorded by the laboratory was 1.1 inches of mercury. No further action was required.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Christopher J. Anderson

Title: Technical Director/Representative

Date: 04/25/25

QC OUTLIER SUMMARY REPORT

Project Name: TUFTS ST.**Lab Number:** L2522887**Project Number:** 045163**Report Date:** 04/25/25

Method	Client ID (Native ID)	Lab ID	Parameter	QC Type	Recovery/RPD (%)	QC Limits (%)	Associated Samples	Data Quality Assessment
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There are no QC Outliers associated with this report.

AIR

Project Name: TUFTS ST.**Project Number:** 045163**Lab Number:** L2522887**Report Date:** 04/25/25**SAMPLE RESULTS**

Lab ID: L2522887-01
 Client ID: 045163-11MORT-1
 Sample Location: SOMERVILLE, MA

Date Collected: 04/08/25 09:11
 Date Received: 04/09/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 04/25/25 00:37
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	0.196	0.020	--	1.05	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	96		60-140
bromochloromethane	96		60-140
chlorobenzene-d5	106		60-140



Project Name: TUFTS ST.**Lab Number:** L2522887**Project Number:** 045163**Report Date:** 04/25/25**SAMPLE RESULTS**

Lab ID: L2522887-02
 Client ID: 045163-11MORT-B
 Sample Location: SOMERVILLE, MA

Date Collected: 04/08/25 09:12
 Date Received: 04/09/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 04/25/25 01:15
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	95		60-140
bromochloromethane	97		60-140
chlorobenzene-d5	98		60-140



Project Name: TUFTS ST.

Lab Number: L2522887

Project Number: 045163

Report Date: 04/25/25

Method Blank Analysis Batch Quality Control

Analytical Method: 101,TO-15-SIM

Analytical Date: 04/24/25 18:06

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab for sample(s): 01-02 Batch: WG2058378-4								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1



Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS ST.

Project Number: 045163

Lab Number: L2522887

Report Date: 04/25/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics in Air by SIM - Mansfield Air Lab Associated sample(s): 01-02 Batch: WG2058378-3								
Vinyl chloride	89		-		70-130	-		
1,1-Dichloroethene	77		-		70-130	-		
trans-1,2-Dichloroethene	104		-		70-130	-		
1,1-Dichloroethane	103		-		70-130	-		
cis-1,2-Dichloroethene	103		-		70-130	-		
1,1,1-Trichloroethane	102		-		70-130	-		
Trichloroethene	96		-		70-130	-		
1,1,2-Trichloroethane	95		-		70-130	-		
Tetrachloroethene	96		-		70-130	-		
1,1,2,2-Tetrachloroethane	99		-		70-130	-		

Lab Duplicate Analysis

Batch Quality Control

Project Name: TUFTS ST.

Project Number: 045163

Lab Number: L2522887

Report Date: 04/25/25

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
MCP Volatile Organics in Air by SIM - Mansfield Air Lab Associated sample(s): 01-02 QC Batch ID: WG2058378-5 QC Sample: L2522887-02 Client ID: 045163-11MORT-B						
Vinyl chloride	ND	ND	ppbV	NC		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1-Dichloroethane	ND	ND	ppbV	NC		25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1,1-Trichloroethane	ND	ND	ppbV	NC		25
Trichloroethene	ND	ND	ppbV	NC		25
1,1,2-Trichloroethane	ND	ND	ppbV	NC		25
Tetrachloroethene	ND	ND	ppbV	NC		25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC		25

Project Name: TUFTS ST.

Project Number: 045163

Serial_No:04252516:40
Lab Number: L2522887

Report Date: 04/25/25

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt	Flow Controller Leak Chk	Flow Out mL/min	Flow In	% RPD
L2522887-01	045163-11MORT-1	01133	Flow 5	02/13/25	505312		-	-	-	Pass	3.0	3.0	0
L2522887-01	045163-11MORT-1	984	6.0L Can	02/13/25	505312	L2507313-08	Pass	-29.7	-6.1	-	-	-	-
L2522887-02	045163-11MORT-B	01919	Flow 5	02/13/25	505312		-	-	-	Pass	3.0	4.0	29
L2522887-02	045163-11MORT-B	4747	6.0L Can	02/13/25	505312	L2507313-08	Pass	-29.7	1.1	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507313
Report Date: 04/25/25

Air Canister Certification Results

Lab ID: L2507313-08
Client ID: CAN 2465 SHELF 43
Sample Location:

Date Collected: 02/11/25 10:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 02/12/25 01:30
Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	1.00	--	ND	2.46	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507313
Report Date: 04/25/25

Air Canister Certification Results

Lab ID: L2507313-08
Client ID: CAN 2465 SHELF 43
Sample Location:

Date Collected: 02/11/25 10:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507313
Report Date: 04/25/25

Air Canister Certification Results

Lab ID: L2507313-08
Client ID: CAN 2465 SHELF 43
Sample Location:

Date Collected: 02/11/25 10:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507313
Report Date: 04/25/25

Air Canister Certification Results

Lab ID: L2507313-08
Client ID: CAN 2465 SHELF 43
Sample Location:

Date Collected: 02/11/25 10:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	0.996	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2507313**Project Number:** CANISTER QC BAT**Report Date:** 04/25/25**Air Canister Certification Results**

Lab ID: L2507313-08

Date Collected: 02/11/25 10:00

Client ID: CAN 2465 SHELF 43

Date Received: 02/11/25

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	89		60-140
Bromochloromethane	96		60-140
chlorobenzene-d5	92		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507313
Report Date: 04/25/25

Air Canister Certification Results

Lab ID: L2507313-08
Client ID: CAN 2465 SHELF 43
Sample Location:

Date Collected: 02/11/25 10:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 02/12/25 01:30
Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507313
Report Date: 04/25/25

Air Canister Certification Results

Lab ID: L2507313-08
Client ID: CAN 2465 SHELF 43
Sample Location:

Date Collected: 02/11/25 10:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2507313
Report Date: 04/25/25

Air Canister Certification Results

Lab ID: L2507313-08
Client ID: CAN 2465 SHELF 43
Sample Location:

Date Collected: 02/11/25 10:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	89		60-140
bromochloromethane	97		60-140
chlorobenzene-d5	93		60-140



Project Name: TUFTS ST.
Project Number: 045163

Serial_No:04252516:40
Lab Number: L2522887
Report Date: 04/25/25

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
NA	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2522887-01A	Canister - 6L (Batch Certified)	NA	NA			Y	Absent		MCP-TO15-SIM(30)
L2522887-02A	Canister - 6L (Batch Certified)	NA	NA			Y	Absent		MCP-TO15-SIM(30)

Project Name: TUFTS ST.**Lab Number:** L2522887**Project Number:** 045163**Report Date:** 04/25/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
	Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report

Project Name: TUFTS ST.
Project Number: 045163

Lab Number: L2522887
Report Date: 04/25/25

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

Report Format: Data Usability Report



Project Name: TUFTS ST.**Lab Number:** L2522887**Project Number:** 045163**Report Date:** 04/25/25**Data Qualifiers**

- ND** - Not detected at the reporting limit (RL) for the sample.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: TUFTS ST.**Lab Number:** L2522887**Project Number:** 045163**Report Date:** 04/25/25

REFERENCES

- 101 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air (EPA/625/R-96/010b:January 1999) with QC Requirements & Performance Standards for the Analysis of TO-15 under the Massachusetts Contingency Plan, WSC-CAM-IXB, July 2010.

LIMITATION OF LIABILITIES

Pace Analytical Services performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Pace Analytical Services shall be to re-perform the work at it's own expense. In no event shall Pace Analytical Services be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Pace Analytical Services.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Pace Analytical Services LLCFacility: **Northeast**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

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Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**EPA 624.1:** m/p-xylene, o-xylene, Naphthalene**EPA 625.1:** alpha-Terpineol**EPA 8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****SM 2540D:** TSS.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

MADEP-APH.**Nonpotable Water:** EPA RSK-175 Dissolved Gases**Biological Tissue Matrix:** EPA 3050B**Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048****EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048**Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)**

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables).**Microbiology:** SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.** **EPA 522, EPA 537.1.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1 Hg.****SM2340B**

Pace Analytical Services LLCID No.:**17873**Facility: **Northeast**

Revision 27

Department: **Quality Assurance**

Published Date: 01/24/2025

Title: **Certificate/Approval Program Summary**

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Certification IDs:**Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**

CT PH-0826, IL 200077, IN C-MA-03, KY JY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 3090, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048

ANAB/DoD L2474, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

For a complete listing of analytes and methods, please contact your Project Manager.



PAGE 1 OF 1

Project-Specific Target Compound List: ☐

Time:

Report to: (if different than Project Manager)

Res / Comm

TO-15
TO-15 SIM
APH Substit Non-petroleum HCs
Fixed Gases
Sulfides & Mercaptans by TO-15

Sample Comments (i.e. PID)
see attached list of analytes

PID)

157

1

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

19.25 120
9125 1825

Indoor Air Sampling Analyte List

- 1,1-Dichloroethane
- 1,1-Dichloroethylene
- trans-1,2-Dichloroethylene
- cis-1,2-Dichloroethylene
- 1,1,1-Trichloroethane
- 1,1,2,2-Tetrachloroethane
- 1,1,2-Trichloroethane
- Tetrachloroethylene
- Trichloroethylene
- Vinyl Chloride



ANALYTICAL REPORT

Lab Number:	L2528265
Client:	GEI Consultants 400 Unicorn Park Drive Woburn, MA 01801
ATTN:	Chris Coner
Phone:	(781) 721-4000
Project Name:	TUFTS ST
Project Number:	045163
Report Date:	05/27/25

The original project report/data package is held by Pace Analytical Services. This report/data package is paginated and should be reproduced only in its entirety. Pace Analytical Services holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: NH ELAP (2249).

120 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.pacelabs.com



Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2528265**Report Date:** 05/27/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2528265-01	045163-11MORT-F1	AIR	SOMERVILLE,MA	05/07/25 09:03	05/07/25
L2528265-02	045163-11MORT-B	AIR	SOMERVILLE,MA	05/07/25 09:07	05/07/25

Project Name: TUFTS ST

Lab Number: L2528265

Project Number: 045163

Report Date: 05/27/25

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	NO
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES
A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	YES
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	NO
For any questions answered "No", please refer to the case narrative section on the following page(s).		

Please note that sample matrix information is located in the Sample Results section of this report.



Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2528265
Report Date: 05/27/25

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Pace Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Pace's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Pace Project Manager and made arrangements for Pace to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2528265
Report Date: 05/27/25

Case Narrative (continued)

MCP Related Narratives

Canisters were released from the laboratory on April 30, 2025. The canister certification data is provided as an addendum.

MCP Volatile Organics in Air

In reference to questions E b/I:

All samples were analyzed for a subset of the MCP compounds per the Chain of Custody.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Jennifer Jerome

Title: Technical Director/Representative

Date: 05/27/25

QC OUTLIER SUMMARY REPORT

Project Name: TUFTS ST**Lab Number:** L2528265**Project Number:** 045163**Report Date:** 05/27/25

Method	Client ID (Native ID)	Lab ID	Parameter	QC Type	Recovery/RPD (%)	QC Limits (%)	Associated Samples	Data Quality Assessment
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There are no QC Outliers associated with this report.

AIR

Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2528265**Report Date:** 05/27/25**SAMPLE RESULTS**

Lab ID: L2528265-01
 Client ID: 045163-11MORT-F1
 Sample Location: SOMERVILLE,MA

Date Collected: 05/07/25 09:03
 Date Received: 05/07/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 05/19/25 01:55
 Analyst: RAY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	0.516	0.020	--	2.77	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.030	0.020	--	0.203	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	87		60-140
bromochloromethane	91		60-140
chlorobenzene-d5	92		60-140



Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2528265**Report Date:** 05/27/25**SAMPLE RESULTS**

Lab ID: L2528265-02
 Client ID: 045163-11MORT-B
 Sample Location: SOMERVILLE,MA

Date Collected: 05/07/25 09:07
 Date Received: 05/07/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 05/19/25 02:37
 Analyst: RAY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	0.050	0.020	--	0.269	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.032	0.020	--	0.217	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	85		60-140
bromochloromethane	90		60-140
chlorobenzene-d5	87		60-140



Project Name: TUFTS ST

Lab Number: L2528265

Project Number: 045163

Report Date: 05/27/25

Method Blank Analysis Batch Quality Control

Analytical Method: 101,TO-15-SIM

Analytical Date: 05/18/25 18:34

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab for sample(s): 01-02 Batch: WG2068148-4								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1



Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS ST

Project Number: 045163

Lab Number: L2528265

Report Date: 05/27/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics in Air by SIM - Mansfield Air Lab Associated sample(s): 01-02 Batch: WG2068148-3								
Vinyl chloride	96		-		70-130	-		
1,1-Dichloroethene	99		-		70-130	-		
trans-1,2-Dichloroethene	95		-		70-130	-		
1,1-Dichloroethane	96		-		70-130	-		
cis-1,2-Dichloroethene	101		-		70-130	-		
1,1,1-Trichloroethane	103		-		70-130	-		
Trichloroethene	98		-		70-130	-		
1,1,2-Trichloroethane	89		-		70-130	-		
Tetrachloroethene	113		-		70-130	-		
1,1,2,2-Tetrachloroethane	96		-		70-130	-		

Project Name: TUFTS ST

Project Number: 045163

Serial_No:05272517:12
Lab Number: L2528265

Report Date: 05/27/25

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt	Flow Controller Leak Chk	Flow Out mL/min	Flow In	% RPD
L2528265-01	045163-11MORT-F1	0245	Flow 5	04/30/25	518339		-	-	-	Pass	2.9	3.2	10
L2528265-01	045163-11MORT-F1	2809	6.0L Can	04/30/25	518339	L2525122-10	Pass	-29.6	-8.4	-	-	-	-
L2528265-02	045163-11MORT-B	02261	Flow 5	04/30/25	518339		-	-	-	Pass	3.2	3.6	12
L2528265-02	045163-11MORT-B	3144	6.0L Can	04/30/25	518339	L2525122-10	Pass	-29.6	-10.6	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2525122
Report Date: 05/27/25

Air Canister Certification Results

Lab ID: L2525122-10
Client ID: CAN 1547 SHELF 58
Sample Location:

Date Collected: 04/24/25 10:00
Date Received: 04/24/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 04/27/25 23:49
Analyst: JFI

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	1.00	--	ND	2.46	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2525122
Report Date: 05/27/25

Air Canister Certification Results

Lab ID: L2525122-10
Client ID: CAN 1547 SHELF 58
Sample Location:

Date Collected: 04/24/25 10:00
Date Received: 04/24/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2525122
Report Date: 05/27/25

Air Canister Certification Results

Lab ID: L2525122-10
Client ID: CAN 1547 SHELF 58
Sample Location:

Date Collected: 04/24/25 10:00
Date Received: 04/24/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2525122
Report Date: 05/27/25

Air Canister Certification Results

Lab ID: L2525122-10
Client ID: CAN 1547 SHELF 58
Sample Location:

Date Collected: 04/24/25 10:00
Date Received: 04/24/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	0.996	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2525122**Project Number:** CANISTER QC BAT**Report Date:** 05/27/25**Air Canister Certification Results**

Lab ID: L2525122-10

Date Collected: 04/24/25 10:00

Client ID: CAN 1547 SHELF 58

Date Received: 04/24/25

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				
No Tentatively Identified Compounds				

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	100		60-140
Bromochloromethane	101		60-140
chlorobenzene-d5	100		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2525122
Report Date: 05/27/25

Air Canister Certification Results

Lab ID: L2525122-10
Client ID: CAN 1547 SHELF 58
Sample Location:

Date Collected: 04/24/25 10:00
Date Received: 04/24/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 04/27/25 23:49
Analyst: JFI

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2525122
Report Date: 05/27/25

Air Canister Certification Results

Lab ID: L2525122-10
Client ID: CAN 1547 SHELF 58
Sample Location:

Date Collected: 04/24/25 10:00
Date Received: 04/24/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2525122**Project Number:** CANISTER QC BAT**Report Date:** 05/27/25**Air Canister Certification Results**

Lab ID: L2525122-10

Date Collected: 04/24/25 10:00

Client ID: CAN 1547 SHELF 58

Date Received: 04/24/25

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	97		60-140
bromochloromethane	102		60-140
chlorobenzene-d5	99		60-140



Project Name: TUFTS ST
Project Number: 045163

Serial_No:05272517:12
Lab Number: L2528265
Report Date: 05/27/25

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
NA	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2528265-01A	Canister - 6L (Batch Certified)	NA	NA			Y	Absent		MCP-TO15-SIM(30)
L2528265-02A	Canister - 6L (Batch Certified)	NA	NA			Y	Absent		MCP-TO15-SIM(30)

Project Name: TUFTS ST**Lab Number:** L2528265**Project Number:** 045163**Report Date:** 05/27/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report

Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2528265
Report Date: 05/27/25

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

Report Format: Data Usability Report



Project Name: TUFTS ST**Lab Number:** L2528265**Project Number:** 045163**Report Date:** 05/27/25**Data Qualifiers**

- ND** - Not detected at the reporting limit (RL) for the sample.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: TUFTS ST**Lab Number:** L2528265**Project Number:** 045163**Report Date:** 05/27/25

REFERENCES

- 101 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air (EPA/625/R-96/010b:January 1999) with QC Requirements & Performance Standards for the Analysis of TO-15 under the Massachusetts Contingency Plan, WSC-CAM-IXB, July 2010.

LIMITATION OF LIABILITIES

Pace Analytical Services performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Pace Analytical Services shall be to re-perform the work at it's own expense. In no event shall Pace Analytical Services be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Pace Analytical Services.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Pace Analytical Services LLCFacility: **Northeast**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

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Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**EPA 624.1:** m/p-xylene, o-xylene, Naphthalene**EPA 625.1:** alpha-Terpineol**EPA 8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****SM 2540D:** TSS.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

MADEP-APH.**Nonpotable Water:** EPA RSK-175 Dissolved Gases**Biological Tissue Matrix:** EPA 3050B**Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048****EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048**Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)**

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LCHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables).**Microbiology:** SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.** **EPA 522, EPA 537.1.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1 Hg.****SM2340B**

Pace Analytical Services LLCID No.:**17873**Facility: **Northeast**

Revision 27

Department: **Quality Assurance**

Published Date: 01/24/2025

Title: **Certificate/Approval Program Summary**

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Certification IDs:**Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**

CT PH-0826, IL 200077, IN C-MA-03, KY JY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 3090, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048

ANAB/DoD L2474, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

For a complete listing of analytes and methods, please contact your Project Manager.

Tufts Street IA/SV Analyte List

- Vinyl chloride
- 1,1-Dichloroethene
- trans-1,2-Dichloroethane
- 1,1-Dichloroethane
- cis-1,2-Dichloroethene
- 1,1,1-Trichloroethane
- Trichloroethene
- 1,1,2-Trichloroethane
- Tetrachloroethene
- 1,1,2,2-Tetrachloroethane



ANALYTICAL REPORT

Lab Number:	L2528274
Client:	GEI Consultants 400 Unicorn Park Drive Woburn, MA 01801
ATTN:	Chris Coner
Phone:	(781) 721-4000
Project Name:	TUFTS ST
Project Number:	045163
Report Date:	05/27/25

The original project report/data package is held by Pace Analytical Services. This report/data package is paginated and should be reproduced only in its entirety. Pace Analytical Services holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: NH ELAP (2249).

120 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.pacelabs.com



Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2528274**Report Date:** 05/27/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2528274-01	045163-84FRANK-B	AIR	SOMERVILLE, MA	05/07/25 09:41	05/07/25
L2528274-02	045163-84FRANK-F1	AIR	SOMERVILLE, MA	05/07/25 09:40	05/07/25
L2528274-03	045163-84FRANK-F2	AIR	SOMERVILLE, MA	05/07/25 09:37	05/07/25

Project Name: TUFTS ST

Lab Number: L2528274

Project Number: 045163

Report Date: 05/27/25

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	NO
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES
A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	YES
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	NO
For any questions answered "No", please refer to the case narrative section on the following page(s).		

Please note that sample matrix information is located in the Sample Results section of this report.



Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2528274
Report Date: 05/27/25

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Pace Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Pace's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Pace Project Manager and made arrangements for Pace to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2528274
Report Date: 05/27/25

Case Narrative (continued)

MCP Related Narratives

Canisters were released from the laboratory on April 30, 2025. The canister certification data is provided as an addendum.

MCP Volatile Organics in Air

In reference to questions E b/I:

All samples were analyzed for a subset of the MCP compounds per the Chain of Custody.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Jennifer Jerome

Title: Technical Director/Representative

Date: 05/27/25

QC OUTLIER SUMMARY REPORT

Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2528274**Report Date:** 05/27/25

Method	Client ID (Native ID)	Lab ID	Parameter	QC Type	Recovery/RPD (%)	QC Limits (%)	Associated Samples	Data Quality Assessment
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There are no QC Outliers associated with this report.

AIR

Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2528274**Report Date:** 05/27/25**SAMPLE RESULTS**

Lab ID: L2528274-01
 Client ID: 045163-84FRANK-B
 Sample Location: SOMERVILLE, MA

Date Collected: 05/07/25 09:41
 Date Received: 05/07/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 05/12/25 23:06
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	0.033	0.020	--	0.131	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.026	0.020	--	0.176	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	91		60-140
bromochloromethane	88		60-140
chlorobenzene-d5	97		60-140



Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2528274**Report Date:** 05/27/25**SAMPLE RESULTS**

Lab ID: L2528274-02
 Client ID: 045163-84FRANK-F1
 Sample Location: SOMERVILLE, MA

Date Collected: 05/07/25 09:40
 Date Received: 05/07/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 05/12/25 23:47
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	0.020	0.020	--	0.079	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.059	0.020	--	0.400	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	81		60-140
bromochloromethane	86		60-140
chlorobenzene-d5	87		60-140



Project Name: TUFTS ST**Project Number:** 045163**Lab Number:** L2528274**Report Date:** 05/27/25**SAMPLE RESULTS**

Lab ID: L2528274-03
 Client ID: 045163-84FRANK-F2
 Sample Location: SOMERVILLE, MA

Date Collected: 05/07/25 09:37
 Date Received: 05/07/25
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 101,TO-15-SIM
 Analytical Date: 05/13/25 00:29
 Analyst: TPH

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.133	0.020	--	0.902	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	79		60-140
bromochloromethane	85		60-140
chlorobenzene-d5	82		60-140



Project Name: TUFTS ST

Lab Number: L2528274

Project Number: 045163

Report Date: 05/27/25

Method Blank Analysis Batch Quality Control

Analytical Method: 101,TO-15-SIM

Analytical Date: 05/12/25 15:23

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
MCP Volatile Organics in Air by SIM - Mansfield Air Lab for sample(s): 01-03 Batch: WG2065632-4								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1



Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS ST

Project Number: 045163

Lab Number: L2528274

Report Date: 05/27/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics in Air by SIM - Mansfield Air Lab Associated sample(s): 01-03 Batch: WG2065632-3								
Vinyl chloride	97		-		70-130	-		
1,1-Dichloroethene	102		-		70-130	-		
trans-1,2-Dichloroethene	92		-		70-130	-		
1,1-Dichloroethane	93		-		70-130	-		
cis-1,2-Dichloroethene	90		-		70-130	-		
1,1,1-Trichloroethane	100		-		70-130	-		
Trichloroethene	96		-		70-130	-		
1,1,2-Trichloroethane	88		-		70-130	-		
Tetrachloroethene	112		-		70-130	-		
1,1,2,2-Tetrachloroethane	98		-		70-130	-		

Project Name: TUFTS ST

Project Number: 045163

Lab Number: Serial_No:05272517:06
L2528274

Report Date: 05/27/25

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt	Flow Controller Leak Chk	Flow Out mL/min	Flow In	% RPD
L2528274-01	045163-84FRANK-B	02439	Flow 5	04/30/25	518339		-	-	-	Pass	3.0	3.4	13
L2528274-01	045163-84FRANK-B	3591	6.0L Can	04/30/25	518339	L2525122-10	Pass	-29.6	-7.8	-	-	-	-
L2528274-02	045163-84FRANK-F1	01040	Flow 5	04/30/25	518339		-	-	-	Pass	3.0	3.2	6
L2528274-02	045163-84FRANK-F1	2655	6.0L Can	04/30/25	518339	L2525122-10	Pass	-29.6	-9.5	-	-	-	-
L2528274-03	045163-84FRANK-F2	0843	Flow 5	04/30/25	518339		-	-	-	Pass	3.1	3.2	3
L2528274-03	045163-84FRANK-F2	3906	6.0L Can	04/30/25	518339	L2525122-10	Pass	-29.6	-10.9	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2525122
Report Date: 05/27/25

Air Canister Certification Results

Lab ID: L2525122-10
Client ID: CAN 1547 SHELF 58
Sample Location:

Date Collected: 04/24/25 10:00
Date Received: 04/24/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 04/27/25 23:49
Analyst: JFI

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	1.00	--	ND	2.46	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2525122
Report Date: 05/27/25

Air Canister Certification Results

Lab ID: L2525122-10
Client ID: CAN 1547 SHELF 58
Sample Location:

Date Collected: 04/24/25 10:00
Date Received: 04/24/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2525122
Report Date: 05/27/25

Air Canister Certification Results

Lab ID: L2525122-10
Client ID: CAN 1547 SHELF 58
Sample Location:

Date Collected: 04/24/25 10:00
Date Received: 04/24/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2525122
Report Date: 05/27/25

Air Canister Certification Results

Lab ID: L2525122-10
Client ID: CAN 1547 SHELF 58
Sample Location:

Date Collected: 04/24/25 10:00
Date Received: 04/24/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	0.996	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2525122**Project Number:** CANISTER QC BAT**Report Date:** 05/27/25**Air Canister Certification Results**

Lab ID: L2525122-10

Date Collected: 04/24/25 10:00

Client ID: CAN 1547 SHELF 58

Date Received: 04/24/25

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Air Lab								

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	100		60-140
Bromochloromethane	101		60-140
chlorobenzene-d5	100		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2525122
Report Date: 05/27/25

Air Canister Certification Results

Lab ID: L2525122-10
Client ID: CAN 1547 SHELF 58
Sample Location:

Date Collected: 04/24/25 10:00
Date Received: 04/24/25
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 04/27/25 23:49
Analyst: JFI

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2525122
Report Date: 05/27/25

Air Canister Certification Results

Lab ID: L2525122-10
Client ID: CAN 1547 SHELF 58
Sample Location:

Date Collected: 04/24/25 10:00
Date Received: 04/24/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2525122
Report Date: 05/27/25

Air Canister Certification Results

Lab ID: L2525122-10
Client ID: CAN 1547 SHELF 58
Sample Location:

Date Collected: 04/24/25 10:00
Date Received: 04/24/25
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Air Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	97		60-140
bromochloromethane	102		60-140
chlorobenzene-d5	99		60-140



Project Name: TUFTS ST
Project Number: 045163

Serial_No:05272517:06
Lab Number: L2528274
Report Date: 05/27/25

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
NA	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2528274-01A	Canister - 6L (Batch Certified)	NA	NA			Y	Absent		MCP-TO15-SIM(30)
L2528274-02A	Canister - 6L (Batch Certified)	NA	NA			Y	Absent		MCP-TO15-SIM(30)
L2528274-03A	Canister - 6L (Batch Certified)	NA	NA			Y	Absent		MCP-TO15-SIM(30)

*Values in parentheses indicate holding time in days



Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2528274
Report Date: 05/27/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report



Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2528274
Report Date: 05/27/25

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

Report Format: Data Usability Report



Project Name: TUFTS ST
Project Number: 045163

Lab Number: L2528274
Report Date: 05/27/25

Data Qualifiers

- ND** - Not detected at the reporting limit (RL) for the sample.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: TUFTS ST**Lab Number:** L2528274**Project Number:** 045163**Report Date:** 05/27/25

REFERENCES

- 101 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air (EPA/625/R-96/010b:January 1999) with QC Requirements & Performance Standards for the Analysis of TO-15 under the Massachusetts Contingency Plan, WSC-CAM-IXB, July 2010.

LIMITATION OF LIABILITIES

Pace Analytical Services performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Pace Analytical Services shall be to re-perform the work at it's own expense. In no event shall Pace Analytical Services be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Pace Analytical Services.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Pace Analytical Services LLCFacility: **Northeast**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

Revision 27

Published Date: 01/24/2025

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Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**EPA 624.1:** m/p-xylene, o-xylene, Naphthalene**EPA 625.1:** alpha-Terpineol**EPA 8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****SM 2540D:** TSS.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

MADEP-APH.**Nonpotable Water:** EPA RSK-175 Dissolved Gases**Biological Tissue Matrix:** EPA 3050B**Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048****EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048**Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)**

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LCHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables).**Microbiology:** SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.** **EPA 522, EPA 537.1.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1 Hg.****SM2340B**

Pace Analytical Services LLCID No.: **17873**Facility: **Northeast**

Revision 27

Department: **Quality Assurance**

Published Date: 01/24/2025

Title: **Certificate/Approval Program Summary**

Page 2 of 2

Certification IDs:**Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**

CT PH-0826, IL 200077, IN C-MA-03, KY JY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 3090, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048

ANAB/DoD L2474, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

For a complete listing of analytes and methods, please contact your Project Manager.

Tufts Street IA/SV Analyte List

- Vinyl chloride
- 1,1-Dichloroethene
- trans-1,2-Dichloroethane
- 1,1-Dichloroethane
- cis-1,2-Dichloroethene
- 1,1,1-Trichloroethane
- Trichloroethene
- 1,1,2-Trichloroethane
- Tetrachloroethene
- 1,1,2,2-Tetrachloroethane

CERTIFICATE OF ANALYSIS

Chris Coner
GEI Consultants, Inc.
400 Unicorn Park Drive
Woburn, MA 01801

RE: 50 Tufts Street (N/A)
ESS Laboratory Work Order Number: 25B0259

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.



Laurel Stoddard
Laboratory Director

REVIEWED

By ESS Laboratory at 6:01 pm, Feb 20, 2025

Analytical Summary

The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with TNI and relative state standards, and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.
Client Project ID: 50 Tufts Street

ESS Laboratory Work Order: 25B0259

SAMPLE RECEIPT

The following samples were received on February 11, 2025 for the analyses specified on the enclosed Chain of Custody Record.

To achieve CAM compliance for MCP data, ESS Laboratory has reviewed all QA/QC Requirements and Performance Standards listed in each method. Holding times and preservation have also been reviewed. All CAM requirements have been performed and achieved unless noted in the project narrative.

Each method has been set-up in the laboratory to reach required MCP standards. The methods for aqueous VOA and Soil Methanol VOA have known limitations for certain analytes. The regulatory standards may not be achieved due to these limitations. In addition, for all methods, matrix interferences, dilutions, and %Solids may elevate method reporting limits above regulatory standards. ESS Laboratory can provide, upon request, a Limit Checker (regulatory standard comparison spreadsheet) electronic deliverable which will highlight these exceedances.

<u>Lab Number</u>	<u>Sample Name</u>	<u>Matrix</u>	<u>Analysis</u>
25B0259-01	045163-50Tufts-TankA	Soil	1311, 1311/8260D, 1311/8270E, 8260D, 8270E

CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.
Client Project ID: 50 Tufts Street

ESS Laboratory Work Order: 25B0259

PROJECT NARRATIVE

Semi-Volatile Organic Compounds

25B0259-01 Elevated Method Reporting Limits due to sample matrix (EL).
25B0259-01 Surrogate recovery(ies) outside of criteria. Reextraction/Reanalysis confirms results (SC).
1,2-Dichlorobenzene-d4 (29% @ 30-130%), 2,4,6-Tribromophenol (11% @ 30-130%), 2-Chlorophenol-d4 (14% @ 30-130%), 2-Fluorobiphenyl (15% @ 30-130%), 2-Fluorophenol (16% @ 30-130%), Nitrobenzene-d5 (25% @ 30-130%), Phenol-d6 (18% @ 30-130%), p-Terphenyl-d14 (2% @ 30-130%)
25B0259-01RE1 Elevated Method Reporting Limits due to sample matrix (EL).
25B0259-01RE1 Internal Standard(s) outside of criteria. Sample was reanalyzed to confirm (IC).
Perylene-d12 (38% @ 50-200%)
25B0259-01RE1 Surrogate recovery(ies) outside of criteria. Reextraction/Reanalysis confirms results (SC).
2,4,6-Tribromophenol (14% @ 30-130%), 2-Chlorophenol-d4 (17% @ 30-130%), 2-Fluorobiphenyl (20% @ 30-130%), 2-Fluorophenol (21% @ 30-130%), p-Terphenyl-d14 (2% @ 30-130%)
D5B0238-CCV1 Calibration required quadratic regression (Q).
2,4-Dinitrophenol (128% @ 40-160%)
D5B0238-CCV1 Continuing Calibration %Diff/Drift is above control limit (CD+).
2,4-Dinitrotoluene (21% @ 20%), Fluoranthene (21% @ 20%)
D5B0238-CCV1 Initial Calibration Verification recovery is below lower control limit (ICV-).
Aniline
D5B0265-CCV1 Calibration required quadratic regression (Q).
2,4-Dinitrophenol (98% @ 40-160%)

TCLP Semivolatile Compounds

D5B0259-CCV1 Continuing Calibration %Diff/Drift is above control limit (CD+).
Pyridine (54% @ 20%)
D5B0259-CCV1 Initial Calibration Verification recovery is above upper control limit (ICV+).
Pyridine

Volatile Organics

25B0259-01 Surrogate recovery(ies) outside of criteria. Reextraction/Reanalysis confirms results (SC).
4-Bromofluorobenzene (3% @ 70-130%), Toluene-d8 (6% @ 70-130%)
25B0259-01RE1 Surrogate recovery(ies) outside of criteria. Reextraction/Reanalysis confirms results (SC).
4-Bromofluorobenzene (3% @ 70-130%), Toluene-d8 (6% @ 70-130%)

Volatile TCLP Compounds

DB51320-BS1 Blank Spike recovery is above upper control limit (B+).
Tetrachloroethene (134% @ 70-130%)

No other observations noted.

End of Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.

Client Project ID: 50 Tufts Street

ESS Laboratory Work Order: 25B0259

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

[Definitions of Quality Control Parameters](#)

[Semivolatile Organics Internal Standard Information](#)

[Semivolatile Organics Surrogate Information](#)

[Volatile Organics Internal Standard Information](#)

[Volatile Organics Surrogate Information](#)

[EPH and VPH Alkane Lists](#)

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010D - ICP
6020B - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015C - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260D - VOA
8270E - SVOA
8270E SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 19-2.1 - EPH
MADEP 18-2.1 - VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.
Client Project ID: 50 Tufts Street

ESS Laboratory Work Order: 25B0259

MassDEP Analytical Protocol Certification Form

MADEP RTN: _____

This form provides certification for the following data set: **25B0259-01 through 25B0259-01RE1**

Matrices: ☐ Ground Water/Surface Water ☒ Soil/Sediment ☐ Drinking Water ☐ Air ☐ Other: _____

CAM Protocol (check all that apply below):

☒ 8260 VOC CAM II A	☐ 7470/7471 Hg CAM III B	☐ MassDEP VPH (GC/PID/FID) CAM IV A	☐ 8082 PCB CAM V A	☐ 9014 Total Cyanide/PAC CAM VI A	☐ 6860 Perchlorate CAM VIII B
☒ 8270 SVOC CAM II B	☐ 7010 Metals CAM III C	☐ MassDEP VPH (GC/MS) CAM IV C	☐ 8081 Pesticides CAM V B	☐ 7196 Hex Cr CAM VI B	☐ MassDEP APH CAM IX A
☐ 6010 Metals CAM III A	☐ 6020 Metals CAM III D	☐ MassDEP EPH CAM IV B	☐ 8151 Herbicides CAM V C	☐ Explosives CAM VIII A	☐ TO-15 VOC CAM IX B

Affirmative responses to questions A through F are required for "Presumptive Certainty" status

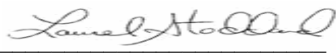
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	Yes ☒ No ☐
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes ☒ No ☐
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	Yes ☒ No ☐
D	Does the laboratory report comply with all the reporting requirements specified in the CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes ☒ No ☐
E	VPH, EPH, APH and TO-15 only: a. Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes ☐ No ☐
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	Yes ☒ No ☐

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols(s)? <u>Data User Note:</u> Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40.1056 (2)(k) and WSC-07-350.	Yes ☐ No ☒ *
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	Yes ☐ No ☒ *
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes ☒ No ☐ *

****All negative responses must be addressed in an attached laboratory narrative.***

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Signature: 
Printed Name: Laurel Stoddard

Date: February 20, 2025
Position: Laboratory Director

CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.
Client Project ID: 50 Tufts Street
Client Sample ID: 045163-50Tufts-TankA
Date Sampled: 02/10/25 13:00
Percent Solids: 99
Initial Volume: 3.3g
Final Volume: 15ml
Extraction Method: 5035

ESS Laboratory Work Order: 25B0259
ESS Laboratory Sample ID: 25B0259-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: MD
Prepared: 2/19/25 8:00

Volatile Organics

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
1,1,1,2-Tetrachloroethane	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
1,1,1-Trichloroethane	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
1,1,2,2-Tetrachloroethane	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
1,1,2-Trichloroethane	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
1,1-Dichloroethane	6.50 (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
1,1-Dichloroethene	3.11 (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
1,1-Dichloropropene	ND (1.84)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
1,2,3-Trichlorobenzene	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
1,2,3-Trichloropropane	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
1,2,4-Trichlorobenzene	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
1,2,4-Trimethylbenzene	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
1,2-Dibromo-3-Chloropropane	ND (4.61)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
1,2-Dibromoethane	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
1,2-Dichlorobenzene	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
1,2-Dichloroethane	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
1,2-Dichloropropane	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
1,3,5-Trimethylbenzene	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
1,3-Dichlorobenzene	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
1,3-Dichloropropane	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
1,4-Dichlorobenzene	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
1,4-Dioxane - Screen	ND (92.2)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
2,2-Dichloropropane	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
2-Butanone	ND (4.61)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
2-Chlorotoluene	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
2-Hexanone	ND (4.61)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
4-Chlorotoluene	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
4-Isopropyltoluene	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926

CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.
Client Project ID: 50 Tufts Street
Client Sample ID: 045163-50Tufts-TankA
Date Sampled: 02/10/25 13:00
Percent Solids: 99
Initial Volume: 3.3g
Final Volume: 15ml
Extraction Method: 5035

ESS Laboratory Work Order: 25B0259
ESS Laboratory Sample ID: 25B0259-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: MD
Prepared: 2/19/25 8:00

Volatile Organics

<u>Analyte</u>	<u>Results (MRL)</u>	<u>MDL</u>	<u>Method</u>	<u>Limit</u>	<u>DF</u>	<u>Analyst</u>	<u>Analyzed</u>	<u>Sequence</u>	<u>Batch</u>
4-Methyl-2-Pentanone	ND (4.61)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
Acetone	ND (4.61)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
Benzene	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
Bromobenzene	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
Bromochloromethane	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
Bromodichloromethane	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
Bromoform	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
Bromomethane	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
Carbon Disulfide	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
Carbon Tetrachloride	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
Chlorobenzene	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
Chloroethane	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
Chloroform	4.72 (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
Chloromethane	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
cis-1,2-Dichloroethene	20.4 (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
cis-1,3-Dichloropropene	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
Dibromochloromethane	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
Dibromomethane	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
Dichlorodifluoromethane	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
Diethyl Ether	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
Di-isopropyl ether	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
Ethyl tertiary-butyl ether	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
Ethylbenzene	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
Hexachlorobutadiene	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
Hexachloroethane	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
Isopropylbenzene	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
Methyl tert-Butyl Ether	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926

CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.
Client Project ID: 50 Tufts Street
Client Sample ID: 045163-50Tufts-TankA
Date Sampled: 02/10/25 13:00
Percent Solids: 99
Initial Volume: 3.3g
Final Volume: 15ml
Extraction Method: 5035

ESS Laboratory Work Order: 25B0259
ESS Laboratory Sample ID: 25B0259-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: MD
Prepared: 2/19/25 8:00

Volatile Organics

<u>Analyte</u>	<u>Results (MRL)</u>	<u>MDL</u>	<u>Method</u>	<u>Limit</u>	<u>DF</u>	<u>Analyst</u>	<u>Analyzed</u>	<u>Sequence</u>	<u>Batch</u>
Methylene Chloride	ND (1.84)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
Naphthalene	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
n-Butylbenzene	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
n-Propylbenzene	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
sec-Butylbenzene	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
Styrene	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
tert-Butylbenzene	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
Tertiary-amyl methyl ether	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
Tetrachloroethene	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
Tetrahydrofuran	ND (4.61)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
Toluene	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
trans-1,2-Dichloroethene	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
trans-1,3-Dichloropropene	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
Trichloroethene	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
Trichlorofluoromethane	2.41 (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
Vinyl Chloride	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
Xylene O	ND (0.922)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
Xylene P,M	ND (1.84)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926
Xylenes (Total)	ND (1.84)	---	8260D	---	1	MD	02/19/25 20:35	D5B0303	DB51926

	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
<i>Surrogate: 1,2-Dichloroethane-d4</i>	77 %		70-130
<i>Surrogate: 4-Bromofluorobenzene</i>	3 %	SC	70-130
<i>Surrogate: Dibromofluoromethane</i>	84 %		70-130
<i>Surrogate: Toluene-d8</i>	6 %	SC	70-130

CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.
Client Project ID: 50 Tufts Street
Client Sample ID: 045163-50Tufts-TankA
Date Sampled: 02/10/25 13:00
Percent Solids: 99
Initial Volume: 5ml
Final Volume: 5ml
Extraction Method: 5030B

ESS Laboratory Work Order: 25B0259
ESS Laboratory Sample ID: 25B0259-01
Sample Matrix: Soil
Units: mg/L
Analyst: MD
Prepared: 2/13/25 8:00

Volatile TCLP Compounds

<u>Analyte</u>	<u>Results (MRL)</u>	<u>MDL</u>	<u>Method</u>	<u>Limit</u>	<u>DF</u>	<u>Analyst</u>	<u>Analyzed</u>	<u>Sequence</u>	<u>Batch</u>
1,1-Dichloroethene	ND (0.100)	---	1311/8260D	---	1	MD	02/13/25 16:19	D5B0237	DB51320
1,2-Dichloroethane	ND (0.100)	---	1311/8260D	---	1	MD	02/13/25 16:19	D5B0237	DB51320
1,4-Dichlorobenzene	ND (0.100)	---	1311/8260D	---	1	MD	02/13/25 16:19	D5B0237	DB51320
2-Butanone	ND (1.00)	---	1311/8260D	---	1	MD	02/13/25 16:19	D5B0237	DB51320
Benzene	ND (0.100)	---	1311/8260D	---	1	MD	02/13/25 16:19	D5B0237	DB51320
Carbon Tetrachloride	ND (0.100)	---	1311/8260D	---	1	MD	02/13/25 16:19	D5B0237	DB51320
Chlorobenzene	ND (0.100)	---	1311/8260D	---	1	MD	02/13/25 16:19	D5B0237	DB51320
Chloroform	ND (0.100)	---	1311/8260D	---	1	MD	02/13/25 16:19	D5B0237	DB51320
Tetrachloroethene	ND (0.100)	---	1311/8260D	---	1	MD	02/13/25 16:19	D5B0237	DB51320
Trichloroethene	ND (0.100)	---	1311/8260D	---	1	MD	02/13/25 16:19	D5B0237	DB51320
Vinyl Chloride	ND (0.100)	---	1311/8260D	---	1	MD	02/13/25 16:19	D5B0237	DB51320

	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>117 %</i>		<i>70-130</i>
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>100 %</i>		<i>70-130</i>
<i>Surrogate: Dibromofluoromethane</i>	<i>106 %</i>		<i>70-130</i>
<i>Surrogate: Toluene-d8</i>	<i>109 %</i>		<i>70-130</i>

CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.
Client Project ID: 50 Tufts Street
Client Sample ID: 045163-50Tufts-TankA
Date Sampled: 02/10/25 13:00
Percent Solids: 99
Initial Volume: 5.36g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 25B0259
ESS Laboratory Sample ID: 25B0259-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TJ
Prepared: 2/12/25 17:00

Semi-Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
1,1-Biphenyl	ND (0.094)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239
1,2,4-Trichlorobenzene	ND (0.943)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239
1,2-Dichlorobenzene	ND (0.943)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239
1,3-Dichlorobenzene	ND (0.943)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239
1,4-Dichlorobenzene	ND (0.472)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239
2,4,5-Trichlorophenol	ND (0.943)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239
2,4,6-Trichlorophenol	ND (0.472)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239
2,4-Dichlorophenol	ND (0.472)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239
2,4-Dimethylphenol	ND (0.943)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239
2,4-Dinitrophenol	ND (1.89)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239
2,4-Dinitrotoluene	ND (0.472)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239
2,6-Dinitrotoluene	ND (0.943)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239
2-Chloronaphthalene	ND (0.943)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239
2-Chlorophenol	ND (0.472)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239
2-Methylnaphthalene	ND (0.472)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239
2-Methylphenol	ND (0.943)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239
2-Nitrophenol	ND (1.89)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239
3,3'-Dichlorobenzidine	ND (0.943)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239
3+4-Methylphenol	ND (0.943)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239
4-Bromophenyl-phenylether	ND (0.943)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239
4-Chloroaniline	ND (0.943)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239
4-Nitrophenol	ND (3.77)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239
Acenaphthene	ND (0.943)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239
Acenaphthylene	ND (0.943)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239
Acetophenone	ND (0.943)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239
Aniline	ND (0.943)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239
Anthracene	ND (0.943)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239

CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.
Client Project ID: 50 Tufts Street
Client Sample ID: 045163-50Tufts-TankA
Date Sampled: 02/10/25 13:00
Percent Solids: 99
Initial Volume: 5.36g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 25B0259
ESS Laboratory Sample ID: 25B0259-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TJ
Prepared: 2/12/25 17:00

Semi-Volatile Organic Compounds

<u>Analyte</u>	<u>Results (MRL)</u>	<u>MDL</u>	<u>Method</u>	<u>Limit</u>	<u>DF</u>	<u>Analyst</u>	<u>Analyzed</u>	<u>Sequence</u>	<u>Batch</u>
Azobenzene	ND (0.943)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239
Benzo(a)anthracene	ND (0.943)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239
Benzo(a)pyrene	ND (0.943)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239
Benzo(b)fluoranthene	ND (0.943)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239
Benzo(g,h,i)perylene	ND (0.943)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239
Benzo(k)fluoranthene	ND (0.943)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239
bis(2-Chloroethoxy)methane	ND (0.943)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239
bis(2-Chloroethyl)ether	ND (0.472)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239
bis(2-chloroisopropyl)Ether	ND (0.472)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239
bis(2-Ethylhexyl)phthalate	ND (0.943)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239
Butylbenzylphthalate	ND (0.943)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239
Chrysene	ND (0.943)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239
Dibenzo(a,h)Anthracene	ND (0.472)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239
Dibenzofuran	ND (0.943)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239
Diethylphthalate	ND (0.943)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239
Dimethylphthalate	ND (0.943)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239
Di-n-butylphthalate	ND (0.943)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239
Di-n-octylphthalate	ND (1.89)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239
Fluoranthene	ND (0.943)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239
Fluorene	ND (0.943)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239
Hexachlorobenzene	ND (0.472)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239
Hexachlorobutadiene	ND (0.943)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239
Hexachloroethane	ND (0.472)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239
Indeno(1,2,3-cd)Pyrene	ND (0.943)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239
Isophorone	ND (0.943)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239
Naphthalene	ND (0.943)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239
Nitrobenzene	ND (0.943)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239

CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.
Client Project ID: 50 Tufts Street
Client Sample ID: 045163-50Tufts-TankA
Date Sampled: 02/10/25 13:00
Percent Solids: 99
Initial Volume: 5.36g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 25B0259
ESS Laboratory Sample ID: 25B0259-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TJ
Prepared: 2/12/25 17:00

Semi-Volatile Organic Compounds

<u>Analyte</u>	<u>Results (MRL)</u>	<u>MDL</u>	<u>Method</u>	<u>Limit</u>	<u>DF</u>	<u>Analyst</u>	<u>Analyzed</u>	<u>Sequence</u>	<u>Batch</u>
N-Nitrosodimethylamine	ND (0.943)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239
Pentachlorophenol	ND (1.89)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239
Phenanthrene	ND (0.943)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239
Phenol	ND (0.943)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239
Pyrene	ND (0.943)	---	8270E	---	1	TJ	02/13/25 20:30	D5B0238	DB51239

	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	29 %	SC	30-130
<i>Surrogate: 2,4,6-Tribromophenol</i>	11 %	SC	30-130
<i>Surrogate: 2-Chlorophenol-d4</i>	14 %	SC	30-130
<i>Surrogate: 2-Fluorobiphenyl</i>	15 %	SC	30-130
<i>Surrogate: 2-Fluorophenol</i>	16 %	SC	30-130
<i>Surrogate: Nitrobenzene-d5</i>	25 %	SC	30-130
<i>Surrogate: Phenol-d6</i>	18 %	SC	30-130
<i>Surrogate: p-Terphenyl-d14</i>	2 %	SC	30-130

CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.
Client Project ID: 50 Tufts Street
Client Sample ID: 045163-50Tufts-TankA
Date Sampled: 02/10/25 13:00
Percent Solids: 99
Initial Volume: 200ml
Final Volume: 1ml
Extraction Method: 3520C

ESS Laboratory Work Order: 25B0259
ESS Laboratory Sample ID: 25B0259-01
Sample Matrix: Soil
Units: mg/L
Analyst: TJ
Prepared: 2/13/25 12:58

TCLP Semivolatile Compounds

<u>Analyte</u>	<u>Results (MRL)</u>	<u>MDL</u>	<u>Method</u>	<u>Limit</u>	<u>DF</u>	<u>Analyst</u>	<u>Analyzed</u>	<u>Sequence</u>	<u>Batch</u>
1,4-Dichlorobenzene	ND (0.0250)	---	1311/8270E	---	1	TJ	02/15/25 4:44	D5B0259	DB51306
2,4,5-Trichlorophenol	ND (0.0500)	---	1311/8270E	---	1	TJ	02/15/25 4:44	D5B0259	DB51306
2,4,6-Trichlorophenol	ND (0.0500)	---	1311/8270E	---	1	TJ	02/15/25 4:44	D5B0259	DB51306
2,4-Dinitrotoluene	ND (0.0500)	---	1311/8270E	---	1	TJ	02/15/25 4:44	D5B0259	DB51306
2-Methylphenol	ND (0.0500)	---	1311/8270E	---	1	TJ	02/15/25 4:44	D5B0259	DB51306
3+4-Methylphenol	ND (0.100)	---	1311/8270E	---	1	TJ	02/15/25 4:44	D5B0259	DB51306
Hexachlorobenzene	ND (0.0500)	---	1311/8270E	---	1	TJ	02/15/25 4:44	D5B0259	DB51306
Hexachlorobutadiene	ND (0.0250)	---	1311/8270E	---	1	TJ	02/15/25 4:44	D5B0259	DB51306
Hexachloroethane	ND (0.0250)	---	1311/8270E	---	1	TJ	02/15/25 4:44	D5B0259	DB51306
Nitrobenzene	ND (0.0500)	---	1311/8270E	---	1	TJ	02/15/25 4:44	D5B0259	DB51306
Pentachlorophenol	ND (0.250)	---	1311/8270E	---	1	TJ	02/15/25 4:44	D5B0259	DB51306
Pyridine	ND (0.500)	---	1311/8270E	---	1	TJ	02/15/25 4:44	D5B0259	DB51306

	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	<i>85 %</i>		<i>30-130</i>
<i>Surrogate: 2,4,6-Tribromophenol</i>	<i>98 %</i>		<i>15-110</i>
<i>Surrogate: 2-Chlorophenol-d4</i>	<i>85 %</i>		<i>15-110</i>
<i>Surrogate: 2-Fluorobiphenyl</i>	<i>92 %</i>		<i>30-130</i>
<i>Surrogate: 2-Fluorophenol</i>	<i>80 %</i>		<i>15-110</i>
<i>Surrogate: Nitrobenzene-d5</i>	<i>89 %</i>		<i>30-130</i>
<i>Surrogate: Phenol-d6</i>	<i>89 %</i>		<i>15-110</i>
<i>Surrogate: p-Terphenyl-d14</i>	<i>87 %</i>		<i>30-130</i>

CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.
Client Project ID: 50 Tufts Street
Client Sample ID: 045163-50Tufts-TankA
Date Sampled: 02/10/25 13:00
Percent Solids: 99
Initial Volume: 100g
Final Volume: 2000ml
Extraction Method: 1311

ESS Laboratory Work Order: 25B0259
ESS Laboratory Sample ID: 25B0259-01
Sample Matrix: Soil
Units: °C
Analyst: RAP
Prepared: 2/11/25 17:23

TCLP Extraction by 1311 - Organics

<u>Analyte</u>	<u>Results (MRL)</u>	<u>MDL</u>	<u>Method</u>	<u>TCLP Limit</u>	<u>DF</u>	<u>Analyst</u>	<u>Analyzed</u>	<u>IV / FV</u>	<u>Batch</u>
Temperature (Min C)	20.5 (N/A)	---	1311	---	1	RAP	02/12/25 9:23	---	DB51121
Temperature (Max C)	21.4 (N/A)	---	1311	---	1	RAP	02/12/25 9:23	---	DB51121
Temperature (Range)	Temperature is not within 23 +/-2 °C. (N/A)								

CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.
Client Project ID: 50 Tufts Street
Client Sample ID: 045163-50Tufts-TankA
Date Sampled: 02/10/25 13:00
Percent Solids: 99
Initial Volume: 25ml
Final Volume: 500ml
Extraction Method: 5030B TCLP

ESS Laboratory Work Order: 25B0259
ESS Laboratory Sample ID: 25B0259-01
Sample Matrix: Soil
Units: °C
Analyst: MD
Prepared: 2/12/25 14:51

ZHE Extraction by 1311

<u>Analyte</u>	<u>Results (MRL)</u>	<u>MDL</u>	<u>Method</u>	<u>TCLP Limit</u>	<u>DF</u>	<u>Analyst</u>	<u>Analyzed</u>	<u>Sequence</u>	<u>Batch</u>
Temperature (Min C)	22.0 (N/A)	---	1311	---	1	MD	02/13/25 7:07	---	DB51410
Temperature (Max C)	22.5 (N/A)	---	1311	---	1	MD	02/13/25 7:07	---	DB51410
Temperature (Range)	Temperature is within 23 +/-2 °C. (N/A)								

CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.
Client Project ID: 50 Tufts Street
Client Sample ID: 045163-50Tufts-TankA
Date Sampled: 02/10/25 13:00
Percent Solids: 99
Initial Volume: 3.3g
Final Volume: 15ml
Extraction Method: 5035

ESS Laboratory Work Order: 25B0259
ESS Laboratory Sample ID: 25B0259-01RE1
Sample Matrix: Soil
Units: mg/kg dry
Analyst: MD
Prepared: 2/19/25 8:00

Volatile Organics

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
1,1,1,2-Tetrachloroethane	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
1,1,1-Trichloroethane	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
1,1,2,2-Tetrachloroethane	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
1,1,2-Trichloroethane	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
1,1-Dichloroethane	6.67 (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
1,1-Dichloroethene	3.14 (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
1,1-Dichloropropene	ND (1.84)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
1,2,3-Trichlorobenzene	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
1,2,3-Trichloropropane	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
1,2,4-Trichlorobenzene	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
1,2,4-Trimethylbenzene	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
1,2-Dibromo-3-Chloropropane	ND (4.61)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
1,2-Dibromoethane	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
1,2-Dichlorobenzene	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
1,2-Dichloroethane	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
1,2-Dichloropropane	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
1,3,5-Trimethylbenzene	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
1,3-Dichlorobenzene	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
1,3-Dichloropropane	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
1,4-Dichlorobenzene	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
1,4-Dioxane - Screen	ND (92.2)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
2,2-Dichloropropane	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
2-Butanone	ND (4.61)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
2-Chlorotoluene	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
2-Hexanone	ND (4.61)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
4-Chlorotoluene	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
4-Isopropyltoluene	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926

CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.
 Client Project ID: 50 Tufts Street
 Client Sample ID: 045163-50Tufts-TankA
 Date Sampled: 02/10/25 13:00
 Percent Solids: 99
 Initial Volume: 3.3g
 Final Volume: 15ml
 Extraction Method: 5035

ESS Laboratory Work Order: 25B0259
 ESS Laboratory Sample ID: 25B0259-01RE1
 Sample Matrix: Soil
 Units: mg/kg dry
 Analyst: MD
 Prepared: 2/19/25 8:00

Volatile Organics

<u>Analyte</u>	<u>Results (MRL)</u>	<u>MDL</u>	<u>Method</u>	<u>Limit</u>	<u>DF</u>	<u>Analyst</u>	<u>Analyzed</u>	<u>Sequence</u>	<u>Batch</u>
4-Methyl-2-Pentanone	ND (4.61)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
Acetone	ND (4.61)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
Benzene	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
Bromobenzene	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
Bromochloromethane	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
Bromodichloromethane	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
Bromoform	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
Bromomethane	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
Carbon Disulfide	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
Carbon Tetrachloride	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
Chlorobenzene	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
Chloroethane	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
Chloroform	4.83 (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
Chloromethane	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
cis-1,2-Dichloroethene	20.7 (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
cis-1,3-Dichloropropene	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
Dibromochloromethane	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
Dibromomethane	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
Dichlorodifluoromethane	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
Diethyl Ether	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
Di-isopropyl ether	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
Ethyl tertiary-butyl ether	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
Ethylbenzene	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
Hexachlorobutadiene	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
Hexachloroethane	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
Isopropylbenzene	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
Methyl tert-Butyl Ether	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926

CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.
Client Project ID: 50 Tufts Street
Client Sample ID: 045163-50Tufts-TankA
Date Sampled: 02/10/25 13:00
Percent Solids: 99
Initial Volume: 3.3g
Final Volume: 15ml
Extraction Method: 5035

ESS Laboratory Work Order: 25B0259
ESS Laboratory Sample ID: 25B0259-01RE1
Sample Matrix: Soil
Units: mg/kg dry
Analyst: MD
Prepared: 2/19/25 8:00

Volatile Organics

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
Methylene Chloride	ND (1.84)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
Naphthalene	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
n-Butylbenzene	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
n-Propylbenzene	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
sec-Butylbenzene	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
Styrene	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
tert-Butylbenzene	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
Tertiary-amyl methyl ether	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
Tetrachloroethene	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
Tetrahydrofuran	ND (4.61)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
Toluene	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
trans-1,2-Dichloroethene	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
trans-1,3-Dichloropropene	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
Trichloroethene	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
Trichlorofluoromethane	2.65 (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
Vinyl Chloride	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
Xylene O	ND (0.922)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
Xylene P,M	ND (1.84)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926
Xylenes (Total)	ND (1.84)	---	8260D	---	1	MD	02/19/25 21:00	D5B0303	DB51926

	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
<i>Surrogate: 1,2-Dichloroethane-d4</i>	77 %		70-130
<i>Surrogate: 4-Bromofluorobenzene</i>	3 %	SC	70-130
<i>Surrogate: Dibromofluoromethane</i>	84 %		70-130
<i>Surrogate: Toluene-d8</i>	6 %	SC	70-130

CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.
Client Project ID: 50 Tufts Street
Client Sample ID: 045163-50Tufts-TankA
Date Sampled: 02/10/25 13:00
Percent Solids: 99
Initial Volume: 5.16g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 25B0259
ESS Laboratory Sample ID: 25B0259-01RE1
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TJ
Prepared: 2/14/25 18:14

Semi-Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
1,1-Biphenyl	ND (0.098)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442
1,2,4-Trichlorobenzene	ND (0.980)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442
1,2-Dichlorobenzene	ND (0.980)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442
1,3-Dichlorobenzene	ND (0.980)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442
1,4-Dichlorobenzene	ND (0.490)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442
2,4,5-Trichlorophenol	ND (0.980)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442
2,4,6-Trichlorophenol	ND (0.490)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442
2,4-Dichlorophenol	ND (0.490)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442
2,4-Dimethylphenol	ND (0.980)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442
2,4-Dinitrophenol	ND (1.96)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442
2,4-Dinitrotoluene	ND (0.490)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442
2,6-Dinitrotoluene	ND (0.980)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442
2-Chloronaphthalene	ND (0.980)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442
2-Chlorophenol	ND (0.490)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442
2-Methylnaphthalene	ND (0.490)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442
2-Methylphenol	ND (0.980)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442
2-Nitrophenol	ND (1.96)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442
3,3'-Dichlorobenzidine	ND (0.980)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442
3+4-Methylphenol	ND (0.980)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442
4-Bromophenyl-phenylether	ND (0.980)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442
4-Chloroaniline	ND (0.980)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442
4-Nitrophenol	ND (3.92)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442
Acenaphthene	ND (0.980)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442
Acenaphthylene	ND (0.980)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442
Acetophenone	ND (0.980)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442
Aniline	ND (0.980)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442
Anthracene	ND (0.980)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442

CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.
Client Project ID: 50 Tufts Street
Client Sample ID: 045163-50Tufts-TankA
Date Sampled: 02/10/25 13:00
Percent Solids: 99
Initial Volume: 5.16g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 25B0259
ESS Laboratory Sample ID: 25B0259-01RE1
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TJ
Prepared: 2/14/25 18:14

Semi-Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
Azobenzene	ND (0.980)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442
Benzo(a)anthracene	ND (0.980)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442
Benzo(a)pyrene	ND (0.980)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442
Benzo(b)fluoranthene	ND (0.980)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442
Benzo(g,h,i)perylene	ND (0.980)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442
Benzo(k)fluoranthene	ND (0.980)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442
bis(2-Chloroethoxy)methane	ND (0.980)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442
bis(2-Chloroethyl)ether	ND (0.490)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442
bis(2-chloroisopropyl)Ether	ND (0.490)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442
bis(2-Ethylhexyl)phthalate	ND (0.980)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442
Butylbenzylphthalate	ND (0.980)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442
Chrysene	ND (0.980)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442
Dibenzo(a,h)Anthracene	ND (0.490)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442
Dibenzofuran	ND (0.980)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442
Diethylphthalate	ND (0.980)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442
Dimethylphthalate	ND (0.980)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442
Di-n-butylphthalate	ND (0.980)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442
Di-n-octylphthalate	ND (1.96)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442
Fluoranthene	ND (0.980)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442
Fluorene	ND (0.980)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442
Hexachlorobenzene	ND (0.490)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442
Hexachlorobutadiene	ND (0.980)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442
Hexachloroethane	ND (0.490)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442
Indeno(1,2,3-cd)Pyrene	ND (0.980)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442
Isophorone	ND (0.980)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442
Naphthalene	ND (0.980)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442
Nitrobenzene	ND (0.980)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442

CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.
Client Project ID: 50 Tufts Street
Client Sample ID: 045163-50Tufts-TankA
Date Sampled: 02/10/25 13:00
Percent Solids: 99
Initial Volume: 5.16g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 25B0259
ESS Laboratory Sample ID: 25B0259-01RE1
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TJ
Prepared: 2/14/25 18:14

Semi-Volatile Organic Compounds

<u>Analyte</u>	<u>Results (MRL)</u>	<u>MDL</u>	<u>Method</u>	<u>Limit</u>	<u>DF</u>	<u>Analyst</u>	<u>Analyzed</u>	<u>Sequence</u>	<u>Batch</u>
N-Nitrosodimethylamine	ND (0.980)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442
Pentachlorophenol	ND (1.96)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442
Phenanthrene	ND (0.980)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442
Phenol	ND (0.980)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442
Pyrene	ND (0.980)	---	8270E	---	1	TJ	02/14/25 23:09	D5B0265	DB51442

	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	42 %		30-130
<i>Surrogate: 2,4,6-Tribromophenol</i>	14 %	SC	30-130
<i>Surrogate: 2-Chlorophenol-d4</i>	17 %	SC	30-130
<i>Surrogate: 2-Fluorobiphenyl</i>	20 %	SC	30-130
<i>Surrogate: 2-Fluorophenol</i>	21 %	SC	30-130
<i>Surrogate: Nitrobenzene-d5</i>	31 %		30-130
<i>Surrogate: Phenol-d6</i>	39 %		30-130
<i>Surrogate: p-Terphenyl-d14</i>	2 %	SC	30-130

CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.
Client Project ID: 50 Tufts Street

ESS Laboratory Work Order: 25B0259

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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Volatile Organics

Batch DB51926 - 5035

Blank

1,1,1,2-Tetrachloroethane	ND	0.200	mg/kg wet
1,1,1-Trichloroethane	ND	0.200	mg/kg wet
1,1,2,2-Tetrachloroethane	ND	0.200	mg/kg wet
1,1,2-Trichloroethane	ND	0.200	mg/kg wet
1,1-Dichloroethane	ND	0.200	mg/kg wet
1,1-Dichloroethene	ND	0.200	mg/kg wet
1,1-Dichloropropene	ND	0.400	mg/kg wet
1,2,3-Trichlorobenzene	ND	0.200	mg/kg wet
1,2,3-Trichloropropane	ND	0.200	mg/kg wet
1,2,4-Trichlorobenzene	ND	0.200	mg/kg wet
1,2,4-Trimethylbenzene	ND	0.200	mg/kg wet
1,2-Dibromo-3-Chloropropane	ND	1.00	mg/kg wet
1,2-Dibromoethane	ND	0.200	mg/kg wet
1,2-Dichlorobenzene	ND	0.200	mg/kg wet
1,2-Dichloroethane	ND	0.200	mg/kg wet
1,2-Dichloropropane	ND	0.200	mg/kg wet
1,3,5-Trimethylbenzene	ND	0.200	mg/kg wet
1,3-Dichlorobenzene	ND	0.200	mg/kg wet
1,3-Dichloropropane	ND	0.200	mg/kg wet
1,4-Dichlorobenzene	ND	0.200	mg/kg wet
1,4-Dioxane - Screen	ND	20.0	mg/kg wet
2,2-Dichloropropane	ND	0.200	mg/kg wet
2-Butanone	ND	1.00	mg/kg wet
2-Chlorotoluene	ND	0.200	mg/kg wet
2-Hexanone	ND	1.00	mg/kg wet
4-Chlorotoluene	ND	0.200	mg/kg wet
4-Isopropyltoluene	ND	0.200	mg/kg wet
4-Methyl-2-Pentanone	ND	1.00	mg/kg wet
Acetone	ND	1.00	mg/kg wet
Benzene	ND	0.200	mg/kg wet
Bromobenzene	ND	0.200	mg/kg wet
Bromochloromethane	ND	0.200	mg/kg wet
Bromodichloromethane	ND	0.200	mg/kg wet
Bromoform	ND	0.200	mg/kg wet
Bromomethane	ND	0.200	mg/kg wet
Carbon Disulfide	ND	0.200	mg/kg wet
Carbon Tetrachloride	ND	0.200	mg/kg wet
Chlorobenzene	ND	0.200	mg/kg wet
Chloroethane	ND	0.200	mg/kg wet
Chloroform	ND	0.200	mg/kg wet
Chloromethane	ND	0.200	mg/kg wet
cis-1,2-Dichloroethene	ND	0.200	mg/kg wet
cis-1,3-Dichloropropene	ND	0.200	mg/kg wet

CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.
Client Project ID: 50 Tufts Street

ESS Laboratory Work Order: 25B0259

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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Volatile Organics

Batch DB51926 - 5035

Dibromochloromethane	ND	0.200	mg/kg wet							
Dibromomethane	ND	0.200	mg/kg wet							
Dichlorodifluoromethane	ND	0.200	mg/kg wet							
Diethyl Ether	ND	0.200	mg/kg wet							
Di-isopropyl ether	ND	0.200	mg/kg wet							
Ethyl tertiary-butyl ether	ND	0.200	mg/kg wet							
Ethylbenzene	ND	0.200	mg/kg wet							
Hexachlorobutadiene	ND	0.200	mg/kg wet							
Hexachloroethane	ND	0.200	mg/kg wet							
Isopropylbenzene	ND	0.200	mg/kg wet							
Methyl tert-Butyl Ether	ND	0.200	mg/kg wet							
Methylene Chloride	ND	0.400	mg/kg wet							
Naphthalene	ND	0.200	mg/kg wet							
n-Butylbenzene	ND	0.200	mg/kg wet							
n-Propylbenzene	ND	0.200	mg/kg wet							
sec-Butylbenzene	ND	0.200	mg/kg wet							
Styrene	ND	0.200	mg/kg wet							
tert-Butylbenzene	ND	0.200	mg/kg wet							
Tertiary-amyl methyl ether	ND	0.200	mg/kg wet							
Tetrachloroethene	ND	0.200	mg/kg wet							
Tetrahydrofuran	ND	1.00	mg/kg wet							
Toluene	ND	0.200	mg/kg wet							
trans-1,2-Dichloroethene	ND	0.200	mg/kg wet							
trans-1,3-Dichloropropene	ND	0.200	mg/kg wet							
Trichloroethene	ND	0.200	mg/kg wet							
Trichlorofluoromethane	ND	0.200	mg/kg wet							
Vinyl Chloride	ND	0.200	mg/kg wet							
Xylene O	ND	0.200	mg/kg wet							
Xylene P,M	ND	0.400	mg/kg wet							
Surrogate: 1,2-Dichloroethane-d4	5.00		mg/kg wet	5.000		100	70-130			
Surrogate: 4-Bromofluorobenzene	5.00		mg/kg wet	5.000		100	70-130			
Surrogate: Dibromofluoromethane	5.00		mg/kg wet	5.000		100	70-130			
Surrogate: Toluene-d8	5.00		mg/kg wet	5.000		100	70-130			

LCS

1,1,1,2-Tetrachloroethane	2.03	0.200	mg/kg wet	2.000		101	70-130			
1,1,1-Trichloroethane	2.10	0.200	mg/kg wet	2.000		105	70-130			
1,1,2,2-Tetrachloroethane	1.80	0.200	mg/kg wet	2.000		90	40-160			
1,1,2-Trichloroethane	1.88	0.200	mg/kg wet	2.000		94	70-130			
1,1-Dichloroethane	2.16	0.200	mg/kg wet	2.000		108	70-130			
1,1-Dichloroethene	2.31	0.200	mg/kg wet	2.000		115	70-130			
1,1-Dichloropropene	2.14	0.400	mg/kg wet	2.000		107	70-130			
1,2,3-Trichlorobenzene	2.04	0.200	mg/kg wet	2.000		102	70-130			
1,2,3-Trichloropropane	1.79	0.200	mg/kg wet	2.000		90	70-130			
1,2,4-Trichlorobenzene	2.06	0.200	mg/kg wet	2.000		103	70-130			
1,2,4-Trimethylbenzene	2.05	0.200	mg/kg wet	2.000		102	70-130			

CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.

Client Project ID: 50 Tufts Street

ESS Laboratory Work Order: 25B0259

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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Volatile Organics

Batch DB51926 - 5035

1,2-Dibromo-3-Chloropropane	1.75	1.00	mg/kg wet	2.000		87	70-130			
1,2-Dibromoethane	1.99	0.200	mg/kg wet	2.000		99	70-130			
1,2-Dichlorobenzene	2.03	0.200	mg/kg wet	2.000		101	70-130			
1,2-Dichloroethane	2.02	0.200	mg/kg wet	2.000		101	70-130			
1,2-Dichloropropane	2.07	0.200	mg/kg wet	2.000		103	70-130			
1,3,5-Trimethylbenzene	2.05	0.200	mg/kg wet	2.000		103	70-130			
1,3-Dichlorobenzene	2.01	0.200	mg/kg wet	2.000		100	70-130			
1,3-Dichloropropane	2.02	0.200	mg/kg wet	2.000		101	70-130			
1,4-Dichlorobenzene	2.05	0.200	mg/kg wet	2.000		102	70-130			
1,4-Dioxane - Screen	40.6	20.0	mg/kg wet	40.00		101	40-160			
2,2-Dichloropropane	2.09	0.200	mg/kg wet	2.000		105	70-130			
2-Butanone	9.98	1.00	mg/kg wet	10.00		100	40-160			
2-Chlorotoluene	2.02	0.200	mg/kg wet	2.000		101	70-130			
2-Hexanone	9.27	1.00	mg/kg wet	10.00		93	40-160			
4-Chlorotoluene	2.03	0.200	mg/kg wet	2.000		102	70-130			
4-Isopropyltoluene	1.98	0.200	mg/kg wet	2.000		99	70-130			
4-Methyl-2-Pentanone	8.84	1.00	mg/kg wet	10.00		88	40-160			
Acetone	9.38	1.00	mg/kg wet	10.00		94	40-160			
Benzene	2.01	0.200	mg/kg wet	2.000		101	70-130			
Bromobenzene	1.99	0.200	mg/kg wet	2.000		100	70-130			
Bromochloromethane	2.05	0.200	mg/kg wet	2.000		103	70-130			
Bromodichloromethane	1.95	0.200	mg/kg wet	2.000		98	70-130			
Bromoform	1.87	0.200	mg/kg wet	2.000		94	40-160			
Bromomethane	2.34	0.200	mg/kg wet	2.000		117	40-160			
Carbon Disulfide	2.21	0.200	mg/kg wet	2.000		111	70-130			
Carbon Tetrachloride	2.04	0.200	mg/kg wet	2.000		102	70-130			
Chlorobenzene	2.02	0.200	mg/kg wet	2.000		101	70-130			
Chloroethane	2.34	0.200	mg/kg wet	2.000		117	40-160			
Chloroform	1.97	0.200	mg/kg wet	2.000		99	70-130			
Chloromethane	1.97	0.200	mg/kg wet	2.000		98	40-160			
cis-1,2-Dichloroethene	2.16	0.200	mg/kg wet	2.000		108	70-130			
cis-1,3-Dichloropropene	1.98	0.200	mg/kg wet	2.000		99	40-160			
Dibromochloromethane	1.94	0.200	mg/kg wet	2.000		97	40-160			
Dibromomethane	2.04	0.200	mg/kg wet	2.000		102	70-130			
Dichlorodifluoromethane	1.60	0.200	mg/kg wet	2.000		80	40-160			
Diethyl Ether	2.13	0.200	mg/kg wet	2.000		106	70-130			
Di-isopropyl ether	2.08	0.200	mg/kg wet	2.000		104	70-130			
Ethyl tertiary-butyl ether	2.03	0.200	mg/kg wet	2.000		102	70-130			
Ethylbenzene	2.00	0.200	mg/kg wet	2.000		100	70-130			
Hexachlorobutadiene	2.28	0.200	mg/kg wet	2.000		114	40-160			
Hexachloroethane	1.87	0.200	mg/kg wet	2.000		94	70-130			
Isopropylbenzene	2.28	0.200	mg/kg wet	2.000		114	70-130			
Methyl tert-Butyl Ether	1.98	0.200	mg/kg wet	2.000		99	70-130			
Methylene Chloride	2.07	0.400	mg/kg wet	2.000		104	70-130			
Naphthalene	1.99	0.200	mg/kg wet	2.000		99	40-160			

CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.
Client Project ID: 50 Tufts Street

ESS Laboratory Work Order: 25B0259

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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Volatile Organics

Batch DB51926 - 5035

n-Butylbenzene	2.10	0.200	mg/kg wet	2.000		105	70-130			
n-Propylbenzene	2.05	0.200	mg/kg wet	2.000		103	70-130			
sec-Butylbenzene	1.95	0.200	mg/kg wet	2.000		98	70-130			
Styrene	1.97	0.200	mg/kg wet	2.000		99	40-160			
tert-Butylbenzene	2.02	0.200	mg/kg wet	2.000		101	70-130			
Tertiary-amyl methyl ether	1.96	0.200	mg/kg wet	2.000		98	70-130			
Tetrachloroethene	2.12	0.200	mg/kg wet	2.000		106	70-130			
Tetrahydrofuran	1.76	1.00	mg/kg wet	2.000		88	70-130			
Toluene	1.98	0.200	mg/kg wet	2.000		99	70-130			
trans-1,2-Dichloroethene	2.34	0.200	mg/kg wet	2.000		117	70-130			
trans-1,3-Dichloropropene	1.97	0.200	mg/kg wet	2.000		99	70-130			
Trichloroethene	2.05	0.200	mg/kg wet	2.000		102	70-130			
Trichlorofluoromethane	2.07	0.200	mg/kg wet	2.000		104	40-160			
Vinyl Chloride	2.16	0.200	mg/kg wet	2.000		108	70-130			
Xylene O	1.97	0.200	mg/kg wet	2.000		99	70-130			
Xylene P,M	3.98	0.400	mg/kg wet	4.000		99	70-130			
Surrogate: 1,2-Dichloroethane-d4	5.17		mg/kg wet	5.000		103	70-130			
Surrogate: 4-Bromofluorobenzene	4.98		mg/kg wet	5.000		100	70-130			
Surrogate: Dibromofluoromethane	5.04		mg/kg wet	5.000		101	70-130			
Surrogate: Toluene-d8	5.04		mg/kg wet	5.000		101	70-130			

LCS Dup

1,1,1,2-Tetrachloroethane	1.99	0.200	mg/kg wet	2.000		100	70-130	2	20	
1,1,1-Trichloroethane	2.09	0.200	mg/kg wet	2.000		104	70-130	0.8	20	
1,1,2,2-Tetrachloroethane	1.77	0.200	mg/kg wet	2.000		88	40-160	2	20	
1,1,2-Trichloroethane	1.91	0.200	mg/kg wet	2.000		96	70-130	2	20	
1,1-Dichloroethane	2.13	0.200	mg/kg wet	2.000		106	70-130	1	20	
1,1-Dichloroethene	2.24	0.200	mg/kg wet	2.000		112	70-130	3	20	
1,1-Dichloropropene	2.11	0.400	mg/kg wet	2.000		105	70-130	2	20	
1,2,3-Trichlorobenzene	1.95	0.200	mg/kg wet	2.000		98	70-130	4	20	
1,2,3-Trichloropropane	1.78	0.200	mg/kg wet	2.000		89	70-130	0.6	20	
1,2,4-Trichlorobenzene	1.99	0.200	mg/kg wet	2.000		100	70-130	3	20	
1,2,4-Trimethylbenzene	2.01	0.200	mg/kg wet	2.000		101	70-130	2	20	
1,2-Dibromo-3-Chloropropane	1.73	1.00	mg/kg wet	2.000		87	70-130	0.8	20	
1,2-Dibromoethane	1.97	0.200	mg/kg wet	2.000		98	70-130	0.8	20	
1,2-Dichlorobenzene	2.00	0.200	mg/kg wet	2.000		100	70-130	1	20	
1,2-Dichloroethane	2.08	0.200	mg/kg wet	2.000		104	70-130	3	20	
1,2-Dichloropropane	2.08	0.200	mg/kg wet	2.000		104	70-130	0.8	20	
1,3,5-Trimethylbenzene	2.01	0.200	mg/kg wet	2.000		100	70-130	2	20	
1,3-Dichlorobenzene	1.99	0.200	mg/kg wet	2.000		100	70-130	0.7	20	
1,3-Dichloropropane	2.01	0.200	mg/kg wet	2.000		100	70-130	0.4	20	
1,4-Dichlorobenzene	2.03	0.200	mg/kg wet	2.000		102	70-130	0.9	20	
1,4-Dioxane - Screen	39.4	20.0	mg/kg wet	40.00		98	40-160	3	20	
2,2-Dichloropropane	2.09	0.200	mg/kg wet	2.000		104	70-130	0.4	20	
2-Butanone	9.70	1.00	mg/kg wet	10.00		97	40-160	3	20	
2-Chlorotoluene	2.00	0.200	mg/kg wet	2.000		100	70-130	1	20	

CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.
Client Project ID: 50 Tufts Street

ESS Laboratory Work Order: 25B0259

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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Volatile Organics

Batch DB51926 - 5035

2-Hexanone	9.28	1.00	mg/kg wet	10.00		93	40-160	0.04	20	
4-Chlorotoluene	2.01	0.200	mg/kg wet	2.000		100	70-130	1	20	
4-Isopropyltoluene	1.91	0.200	mg/kg wet	2.000		95	70-130	4	20	
4-Methyl-2-Pentanone	8.79	1.00	mg/kg wet	10.00		88	40-160	0.5	20	
Acetone	9.32	1.00	mg/kg wet	10.00		93	40-160	0.6	20	
Benzene	2.00	0.200	mg/kg wet	2.000		100	70-130	0.9	20	
Bromobenzene	2.00	0.200	mg/kg wet	2.000		100	70-130	0.2	20	
Bromochloromethane	2.03	0.200	mg/kg wet	2.000		101	70-130	1	20	
Bromodichloromethane	2.02	0.200	mg/kg wet	2.000		101	70-130	4	20	
Bromoform	1.87	0.200	mg/kg wet	2.000		94	40-160	0	20	
Bromomethane	2.18	0.200	mg/kg wet	2.000		109	40-160	7	20	
Carbon Disulfide	2.11	0.200	mg/kg wet	2.000		105	70-130	5	20	
Carbon Tetrachloride	2.04	0.200	mg/kg wet	2.000		102	70-130	0.1	20	
Chlorobenzene	2.00	0.200	mg/kg wet	2.000		100	70-130	0.8	20	
Chloroethane	2.25	0.200	mg/kg wet	2.000		113	40-160	4	20	
Chloroform	2.00	0.200	mg/kg wet	2.000		100	70-130	2	20	
Chloromethane	1.97	0.200	mg/kg wet	2.000		99	40-160	0.4	20	
cis-1,2-Dichloroethene	2.16	0.200	mg/kg wet	2.000		108	70-130	0.09	20	
cis-1,3-Dichloropropene	1.95	0.200	mg/kg wet	2.000		98	40-160	1	20	
Dibromochloromethane	1.94	0.200	mg/kg wet	2.000		97	40-160	0.1	20	
Dibromomethane	2.03	0.200	mg/kg wet	2.000		101	70-130	0.7	20	
Dichlorodifluoromethane	1.61	0.200	mg/kg wet	2.000		80	40-160	0.7	20	
Diethyl Ether	2.15	0.200	mg/kg wet	2.000		108	70-130	1	20	
Di-isopropyl ether	2.08	0.200	mg/kg wet	2.000		104	70-130	0.2	20	
Ethyl tertiary-butyl ether	2.05	0.200	mg/kg wet	2.000		102	70-130	0.7	20	
Ethylbenzene	1.99	0.200	mg/kg wet	2.000		99	70-130	0.5	20	
Hexachlorobutadiene	2.14	0.200	mg/kg wet	2.000		107	40-160	6	20	
Hexachloroethane	1.80	0.200	mg/kg wet	2.000		90	70-130	4	20	
Isopropylbenzene	2.25	0.200	mg/kg wet	2.000		112	70-130	2	20	
Methyl tert-Butyl Ether	1.99	0.200	mg/kg wet	2.000		100	70-130	0.3	20	
Methylene Chloride	2.05	0.400	mg/kg wet	2.000		103	70-130	1	20	
Naphthalene	1.95	0.200	mg/kg wet	2.000		97	40-160	2	20	
n-Butylbenzene	1.98	0.200	mg/kg wet	2.000		99	70-130	6	20	
n-Propylbenzene	2.02	0.200	mg/kg wet	2.000		101	70-130	2	20	
sec-Butylbenzene	1.86	0.200	mg/kg wet	2.000		93	70-130	5	20	
Styrene	1.97	0.200	mg/kg wet	2.000		98	40-160	0.1	20	
tert-Butylbenzene	1.97	0.200	mg/kg wet	2.000		98	70-130	3	20	
Tertiary-amyl methyl ether	1.96	0.200	mg/kg wet	2.000		98	70-130	0.3	20	
Tetrachloroethene	2.19	0.200	mg/kg wet	2.000		110	70-130	3	20	
Tetrahydrofuran	2.12	1.00	mg/kg wet	2.000		106	70-130	19	20	
Toluene	1.97	0.200	mg/kg wet	2.000		99	70-130	0.3	20	
trans-1,2-Dichloroethene	2.23	0.200	mg/kg wet	2.000		112	70-130	5	20	
trans-1,3-Dichloropropene	1.96	0.200	mg/kg wet	2.000		98	70-130	0.8	20	
Trichloroethene	2.08	0.200	mg/kg wet	2.000		104	70-130	1	20	
Trichlorofluoromethane	2.00	0.200	mg/kg wet	2.000		100	40-160	4	20	

CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.
Client Project ID: 50 Tufts Street

ESS Laboratory Work Order: 25B0259

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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Volatile Organics

Batch DB51926 - 5035

Vinyl Chloride	2.11	0.200	mg/kg wet	2.000		106	70-130	2	20	
Xylene O	1.96	0.200	mg/kg wet	2.000		98	70-130	0.6	20	
Xylene P,M	3.97	0.400	mg/kg wet	4.000		99	70-130	0.2	20	
Surrogate: 1,2-Dichloroethane-d4	5.16		mg/kg wet	5.000		103	70-130			
Surrogate: 4-Bromofluorobenzene	4.97		mg/kg wet	5.000		99	70-130			
Surrogate: Dibromofluoromethane	5.02		mg/kg wet	5.000		100	70-130			
Surrogate: Toluene-d8	5.02		mg/kg wet	5.000		100	70-130			

Volatile TCLP Compounds

Batch DB51320 - 5030B

Blank

1,1-Dichloroethene	ND	0.0050	mg/L							
1,2-Dichloroethane	ND	0.0050	mg/L							
1,4-Dichlorobenzene	ND	0.0050	mg/L							
2-Butanone	ND	0.0500	mg/L							
Benzene	ND	0.0050	mg/L							
Carbon Tetrachloride	ND	0.0050	mg/L							
Chlorobenzene	ND	0.0050	mg/L							
Chloroform	ND	0.0050	mg/L							
Tetrachloroethene	ND	0.0050	mg/L							
Trichloroethene	ND	0.0050	mg/L							
Vinyl Chloride	ND	0.0050	mg/L							
Surrogate: 1,2-Dichloroethane-d4	0.0282		mg/L	0.02500		113	70-130			
Surrogate: 4-Bromofluorobenzene	0.0253		mg/L	0.02500		101	70-130			
Surrogate: Dibromofluoromethane	0.0263		mg/L	0.02500		105	70-130			
Surrogate: Toluene-d8	0.0273		mg/L	0.02500		109	70-130			

LCS

1,1-Dichloroethene	0.0103	0.0010	mg/L	0.01000		103	70-130			
1,2-Dichloroethane	0.0094	0.0010	mg/L	0.01000		94	70-130			
1,4-Dichlorobenzene	0.0102	0.0010	mg/L	0.01000		102	70-130			
2-Butanone	0.0454	0.0100	mg/L	0.05000		91	40-160			
Benzene	0.0092	0.0010	mg/L	0.01000		92	70-130			
Carbon Tetrachloride	0.0104	0.0010	mg/L	0.01000		104	70-130			
Chlorobenzene	0.0098	0.0010	mg/L	0.01000		98	70-130			
Chloroform	0.0095	0.0010	mg/L	0.01000		95	70-130			
Tetrachloroethene	0.0134	0.0010	mg/L	0.01000		134	70-130			B+
Trichloroethene	0.0101	0.0010	mg/L	0.01000		101	70-130			
Vinyl Chloride	0.0098	0.0010	mg/L	0.01000		98	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0276		mg/L	0.02500		110	70-130			
Surrogate: 4-Bromofluorobenzene	0.0266		mg/L	0.02500		107	70-130			
Surrogate: Dibromofluoromethane	0.0264		mg/L	0.02500		106	70-130			
Surrogate: Toluene-d8	0.0267		mg/L	0.02500		107	70-130			

LCS Dup

1,1-Dichloroethene	0.0094	0.0010	mg/L	0.01000		94	70-130	9	20	
1,2-Dichloroethane	0.0090	0.0010	mg/L	0.01000		90	70-130	5	20	

CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.
Client Project ID: 50 Tufts Street

ESS Laboratory Work Order: 25B0259

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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Volatile TCLP Compounds

Batch DB51320 - 5030B

1,4-Dichlorobenzene	0.0095	0.0010	mg/L	0.01000		95	70-130	7	20	
2-Butanone	0.0438	0.0100	mg/L	0.05000		88	40-160	3	20	
Benzene	0.0087	0.0010	mg/L	0.01000		87	70-130	5	20	
Carbon Tetrachloride	0.0098	0.0010	mg/L	0.01000		98	70-130	5	20	
Chlorobenzene	0.0093	0.0010	mg/L	0.01000		93	70-130	6	20	
Chloroform	0.0088	0.0010	mg/L	0.01000		88	70-130	8	20	
Tetrachloroethene	0.0127	0.0010	mg/L	0.01000		127	70-130	5	20	
Trichloroethene	0.0096	0.0010	mg/L	0.01000		96	70-130	5	20	
Vinyl Chloride	0.0089	0.0010	mg/L	0.01000		89	70-130	10	20	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0274</i>		mg/L	<i>0.02500</i>		<i>110</i>	<i>70-130</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0268</i>		mg/L	<i>0.02500</i>		<i>107</i>	<i>70-130</i>			
<i>Surrogate: Dibromofluoromethane</i>	<i>0.0263</i>		mg/L	<i>0.02500</i>		<i>105</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0268</i>		mg/L	<i>0.02500</i>		<i>107</i>	<i>70-130</i>			

Semi-Volatile Organic Compounds

Batch DB51239 - 3546

Blank

1,1-Biphenyl	ND	0.025	mg/kg wet
1,2,4-Trichlorobenzene	ND	0.250	mg/kg wet
1,2-Dichlorobenzene	ND	0.250	mg/kg wet
1,3-Dichlorobenzene	ND	0.250	mg/kg wet
1,4-Dichlorobenzene	ND	0.125	mg/kg wet
2,4,5-Trichlorophenol	ND	0.250	mg/kg wet
2,4,6-Trichlorophenol	ND	0.125	mg/kg wet
2,4-Dichlorophenol	ND	0.125	mg/kg wet
2,4-Dimethylphenol	ND	0.250	mg/kg wet
2,4-Dinitrophenol	ND	0.500	mg/kg wet
2,4-Dinitrotoluene	ND	0.125	mg/kg wet
2,6-Dinitrotoluene	ND	0.250	mg/kg wet
2-Chloronaphthalene	ND	0.250	mg/kg wet
2-Chlorophenol	ND	0.125	mg/kg wet
2-Methylnaphthalene	ND	0.125	mg/kg wet
2-Methylphenol	ND	0.250	mg/kg wet
2-Nitrophenol	ND	0.500	mg/kg wet
3,3'-Dichlorobenzidine	ND	0.250	mg/kg wet
3+4-Methylphenol	ND	0.250	mg/kg wet
4-Bromophenyl-phenylether	ND	0.250	mg/kg wet
4-Chloroaniline	ND	0.250	mg/kg wet
4-Nitrophenol	ND	1.00	mg/kg wet
Acenaphthene	ND	0.250	mg/kg wet
Acenaphthylene	ND	0.250	mg/kg wet
Acetophenone	ND	0.250	mg/kg wet
Aniline	ND	0.250	mg/kg wet
Anthracene	ND	0.250	mg/kg wet
Azobenzene	ND	0.250	mg/kg wet

CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.
Client Project ID: 50 Tufts Street

ESS Laboratory Work Order: 25B0259

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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Semi-Volatile Organic Compounds

Batch DB51239 - 3546

Benzo(a)anthracene	ND	0.250	mg/kg wet							
Benzo(a)pyrene	ND	0.250	mg/kg wet							
Benzo(b)fluoranthene	ND	0.250	mg/kg wet							
Benzo(g,h,i)perylene	ND	0.250	mg/kg wet							
Benzo(k)fluoranthene	ND	0.250	mg/kg wet							
bis(2-Chloroethoxy)methane	ND	0.250	mg/kg wet							
bis(2-Chloroethyl)ether	ND	0.125	mg/kg wet							
bis(2-chloroisopropyl)Ether	ND	0.125	mg/kg wet							
bis(2-Ethylhexyl)phthalate	ND	0.250	mg/kg wet							
Butylbenzylphthalate	ND	0.250	mg/kg wet							
Chrysene	ND	0.250	mg/kg wet							
Dibenzo(a,h)Anthracene	ND	0.125	mg/kg wet							
Dibenzofuran	ND	0.250	mg/kg wet							
Diethylphthalate	ND	0.250	mg/kg wet							
Dimethylphthalate	ND	0.250	mg/kg wet							
Di-n-butylphthalate	ND	0.250	mg/kg wet							
Di-n-octylphthalate	ND	0.500	mg/kg wet							
Fluoranthene	ND	0.250	mg/kg wet							
Fluorene	ND	0.250	mg/kg wet							
Hexachlorobenzene	ND	0.125	mg/kg wet							
Hexachlorobutadiene	ND	0.250	mg/kg wet							
Hexachloroethane	ND	0.125	mg/kg wet							
Indeno(1,2,3-cd)Pyrene	ND	0.250	mg/kg wet							
Isophorone	ND	0.250	mg/kg wet							
Naphthalene	ND	0.250	mg/kg wet							
Nitrobenzene	ND	0.250	mg/kg wet							
N-Nitrosodimethylamine	ND	0.250	mg/kg wet							
Pentachlorophenol	ND	0.500	mg/kg wet							
Phenanthrene	ND	0.250	mg/kg wet							
Phenol	ND	0.250	mg/kg wet							
Pyrene	ND	0.250	mg/kg wet							
Surrogate: 1,2-Dichlorobenzene-d4	2.07		mg/kg wet	2.500		83	30-130			
Surrogate: 2,4,6-Tribromophenol	2.98		mg/kg wet	3.750		80	30-130			
Surrogate: 2-Chlorophenol-d4	3.16		mg/kg wet	3.750		84	30-130			
Surrogate: 2-Fluorobiphenyl	2.09		mg/kg wet	2.500		84	30-130			
Surrogate: 2-Fluorophenol	3.21		mg/kg wet	3.750		86	30-130			
Surrogate: Nitrobenzene-d5	2.04		mg/kg wet	2.500		81	30-130			
Surrogate: Phenol-d6	3.21		mg/kg wet	3.750		86	30-130			
Surrogate: p-Terphenyl-d14	2.22		mg/kg wet	2.500		89	30-130			

LCS

1,1-Biphenyl	1.80	0.025	mg/kg wet	2.500		72	40-140			
1,2,4-Trichlorobenzene	1.71	0.250	mg/kg wet	2.500		68	40-140			
1,2-Dichlorobenzene	1.73	0.250	mg/kg wet	2.500		69	40-140			
1,3-Dichlorobenzene	1.69	0.250	mg/kg wet	2.500		68	40-140			
1,4-Dichlorobenzene	1.68	0.125	mg/kg wet	2.500		67	40-140			

CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.

Client Project ID: 50 Tufts Street

ESS Laboratory Work Order: 25B0259

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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Semi-Volatile Organic Compounds

Batch DB51239 - 3546

2,4,5-Trichlorophenol	1.94	0.250	mg/kg wet	2.500		78	30-130			
2,4,6-Trichlorophenol	1.92	0.125	mg/kg wet	2.500		77	30-130			
2,4-Dichlorophenol	1.87	0.125	mg/kg wet	2.500		75	30-130			
2,4-Dimethylphenol	1.89	0.250	mg/kg wet	2.500		76	30-130			
2,4-Dinitrophenol	2.04	0.500	mg/kg wet	2.500		82	15-140			
2,4-Dinitrotoluene	2.04	0.125	mg/kg wet	2.500		82	40-140			
2,6-Dinitrotoluene	1.95	0.250	mg/kg wet	2.500		78	40-140			
2-Chloronaphthalene	1.66	0.250	mg/kg wet	2.500		67	40-140			
2-Chlorophenol	1.83	0.125	mg/kg wet	2.500		73	30-130			
2-Methylnaphthalene	1.71	0.125	mg/kg wet	2.500		69	40-140			
2-Methylphenol	1.91	0.250	mg/kg wet	2.500		77	15-140			
2-Nitrophenol	1.78	0.500	mg/kg wet	2.500		71	30-130			
3,3'-Dichlorobenzidine	1.85	0.250	mg/kg wet	2.500		74	40-140			
3+4-Methylphenol	1.86	0.250	mg/kg wet	2.500		74	15-140			
4-Bromophenyl-phenylether	1.92	0.250	mg/kg wet	2.500		77	40-140			
4-Chloroaniline	1.69	0.250	mg/kg wet	2.500		68	15-140			
4-Nitrophenol	1.99	1.00	mg/kg wet	2.500		79	15-140			
Acenaphthene	1.80	0.250	mg/kg wet	2.500		72	40-140			
Acenaphthylene	1.74	0.250	mg/kg wet	2.500		70	40-140			
Acetophenone	1.83	0.250	mg/kg wet	2.500		73	40-140			
Aniline	1.52	0.250	mg/kg wet	2.500		61	40-140			
Anthracene	1.97	0.250	mg/kg wet	2.500		79	40-140			
Azobenzene	1.87	0.250	mg/kg wet	2.500		75	40-140			
Benzo(a)anthracene	1.82	0.250	mg/kg wet	2.500		73	40-140			
Benzo(a)pyrene	1.96	0.250	mg/kg wet	2.500		79	40-140			
Benzo(b)fluoranthene	1.94	0.250	mg/kg wet	2.500		78	40-140			
Benzo(g,h,i)perylene	1.60	0.250	mg/kg wet	2.500		64	40-140			
Benzo(k)fluoranthene	1.92	0.250	mg/kg wet	2.500		77	40-140			
bis(2-Chloroethoxy)methane	1.72	0.250	mg/kg wet	2.500		69	40-140			
bis(2-Chloroethyl)ether	1.74	0.125	mg/kg wet	2.500		70	40-140			
bis(2-chloroisopropyl)Ether	1.70	0.125	mg/kg wet	2.500		68	40-140			
bis(2-Ethylhexyl)phthalate	1.77	0.250	mg/kg wet	2.500		71	40-140			
Butylbenzylphthalate	1.82	0.250	mg/kg wet	2.500		73	40-140			
Chrysene	1.86	0.250	mg/kg wet	2.500		74	40-140			
Dibenzo(a,h)Anthracene	1.78	0.125	mg/kg wet	2.500		71	40-140			
Dibenzofuran	1.83	0.250	mg/kg wet	2.500		73	40-140			
Diethylphthalate	1.92	0.250	mg/kg wet	2.500		77	40-140			
Dimethylphthalate	1.86	0.250	mg/kg wet	2.500		75	15-140			
Di-n-butylphthalate	2.02	0.250	mg/kg wet	2.500		81	40-140			
Di-n-octylphthalate	1.89	0.500	mg/kg wet	2.500		76	40-140			
Fluoranthene	2.13	0.250	mg/kg wet	2.500		85	40-140			
Fluorene	1.92	0.250	mg/kg wet	2.500		77	40-140			
Hexachlorobenzene	1.89	0.125	mg/kg wet	2.500		76	40-140			
Hexachlorobutadiene	1.81	0.250	mg/kg wet	2.500		72	40-140			
Hexachloroethane	1.75	0.125	mg/kg wet	2.500		70	40-140			

CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.
Client Project ID: 50 Tufts Street

ESS Laboratory Work Order: 25B0259

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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Semi-Volatile Organic Compounds

Batch DB51239 - 3546

Indeno(1,2,3-cd)Pyrene	1.71	0.250	mg/kg wet	2.500		68	40-140			
Isophorone	1.85	0.250	mg/kg wet	2.500		74	40-140			
Naphthalene	1.69	0.250	mg/kg wet	2.500		68	40-140			
Nitrobenzene	1.81	0.250	mg/kg wet	2.500		72	40-140			
N-Nitrosodimethylamine	1.68	0.250	mg/kg wet	2.500		67	40-140			
Pentachlorophenol	1.48	0.500	mg/kg wet	2.500		59	15-140			
Phenanthrene	1.93	0.250	mg/kg wet	2.500		77	40-140			
Phenol	1.81	0.250	mg/kg wet	2.500		73	15-140			
Pyrene	1.70	0.250	mg/kg wet	2.500		68	40-140			
Surrogate: 1,2-Dichlorobenzene-d4	1.87		mg/kg wet	2.500		75	30-130			
Surrogate: 2,4,6-Tribromophenol	3.17		mg/kg wet	3.750		84	30-130			
Surrogate: 2-Chlorophenol-d4	2.92		mg/kg wet	3.750		78	30-130			
Surrogate: 2-Fluorobiphenyl	1.87		mg/kg wet	2.500		75	30-130			
Surrogate: 2-Fluorophenol	2.92		mg/kg wet	3.750		78	30-130			
Surrogate: Nitrobenzene-d5	1.84		mg/kg wet	2.500		74	30-130			
Surrogate: Phenol-d6	2.87		mg/kg wet	3.750		77	30-130			
Surrogate: p-Terphenyl-d14	1.83		mg/kg wet	2.500		73	30-130			

LCS Dup

1,1-Biphenyl	1.80	0.025	mg/kg wet	2.500		72	40-140	0.1	30	
1,2,4-Trichlorobenzene	1.74	0.250	mg/kg wet	2.500		70	40-140	2	30	
1,2-Dichlorobenzene	1.72	0.250	mg/kg wet	2.500		69	40-140	0.6	30	
1,3-Dichlorobenzene	1.70	0.250	mg/kg wet	2.500		68	40-140	0.2	30	
1,4-Dichlorobenzene	1.68	0.125	mg/kg wet	2.500		67	40-140	0.03	30	
2,4,5-Trichlorophenol	1.95	0.250	mg/kg wet	2.500		78	30-130	0.2	30	
2,4,6-Trichlorophenol	1.91	0.125	mg/kg wet	2.500		76	30-130	0.3	30	
2,4-Dichlorophenol	1.89	0.125	mg/kg wet	2.500		76	30-130	1	30	
2,4-Dimethylphenol	1.91	0.250	mg/kg wet	2.500		76	30-130	0.7	30	
2,4-Dinitrophenol	2.31	0.500	mg/kg wet	2.500		92	15-140	12	30	
2,4-Dinitrotoluene	2.03	0.125	mg/kg wet	2.500		81	40-140	0.8	30	
2,6-Dinitrotoluene	1.94	0.250	mg/kg wet	2.500		77	40-140	0.9	30	
2-Chloronaphthalene	1.63	0.250	mg/kg wet	2.500		65	40-140	2	30	
2-Chlorophenol	1.81	0.125	mg/kg wet	2.500		72	30-130	1	30	
2-Methylnaphthalene	1.70	0.125	mg/kg wet	2.500		68	40-140	0.6	30	
2-Methylphenol	1.89	0.250	mg/kg wet	2.500		76	15-140	1	30	
2-Nitrophenol	1.84	0.500	mg/kg wet	2.500		74	30-130	4	30	
3,3'-Dichlorobenzidine	1.80	0.250	mg/kg wet	2.500		72	40-140	3	30	
3+4-Methylphenol	1.86	0.250	mg/kg wet	2.500		74	15-140	0.1	30	
4-Bromophenyl-phenylether	1.91	0.250	mg/kg wet	2.500		77	40-140	0.6	30	
4-Chloroaniline	1.69	0.250	mg/kg wet	2.500		68	15-140	0.08	30	
4-Nitrophenol	1.86	1.00	mg/kg wet	2.500		74	15-140	7	30	
Acenaphthene	1.80	0.250	mg/kg wet	2.500		72	40-140	0.3	30	
Acenaphthylene	1.75	0.250	mg/kg wet	2.500		70	40-140	0.3	30	
Acetophenone	1.84	0.250	mg/kg wet	2.500		74	40-140	0.8	30	
Aniline	1.54	0.250	mg/kg wet	2.500		62	40-140	2	30	
Anthracene	1.94	0.250	mg/kg wet	2.500		77	40-140	2	30	

CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.
Client Project ID: 50 Tufts Street

ESS Laboratory Work Order: 25B0259

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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Semi-Volatile Organic Compounds

Batch DB51239 - 3546

Azobenzene	1.93	0.250	mg/kg wet	2.500		77	40-140	3	30	
Benzo(a)anthracene	1.80	0.250	mg/kg wet	2.500		72	40-140	1	30	
Benzo(a)pyrene	1.95	0.250	mg/kg wet	2.500		78	40-140	0.9	30	
Benzo(b)fluoranthene	1.92	0.250	mg/kg wet	2.500		77	40-140	0.9	30	
Benzo(g,h,i)perylene	1.59	0.250	mg/kg wet	2.500		64	40-140	0.8	30	
Benzo(k)fluoranthene	1.92	0.250	mg/kg wet	2.500		77	40-140	0.3	30	
bis(2-Chloroethoxy)methane	1.77	0.250	mg/kg wet	2.500		71	40-140	3	30	
bis(2-Chloroethyl)ether	1.70	0.125	mg/kg wet	2.500		68	40-140	3	30	
bis(2-chloroisopropyl)Ether	1.69	0.125	mg/kg wet	2.500		68	40-140	0.5	30	
bis(2-Ethylhexyl)phthalate	1.88	0.250	mg/kg wet	2.500		75	40-140	6	30	
Butylbenzylphthalate	1.93	0.250	mg/kg wet	2.500		77	40-140	6	30	
Chrysene	1.84	0.250	mg/kg wet	2.500		73	40-140	1	30	
Dibenzo(a,h)Anthracene	1.72	0.125	mg/kg wet	2.500		69	40-140	4	30	
Dibenzofuran	1.80	0.250	mg/kg wet	2.500		72	40-140	1	30	
Diethylphthalate	1.89	0.250	mg/kg wet	2.500		75	40-140	2	30	
Dimethylphthalate	1.85	0.250	mg/kg wet	2.500		74	15-140	0.8	30	
Di-n-butylphthalate	2.02	0.250	mg/kg wet	2.500		81	40-140	0.3	30	
Di-n-octylphthalate	2.07	0.500	mg/kg wet	2.500		83	40-140	9	30	
Fluoranthene	1.99	0.250	mg/kg wet	2.500		80	40-140	7	30	
Fluorene	1.89	0.250	mg/kg wet	2.500		75	40-140	2	30	
Hexachlorobenzene	1.90	0.125	mg/kg wet	2.500		76	40-140	0.5	30	
Hexachlorobutadiene	1.76	0.250	mg/kg wet	2.500		70	40-140	3	30	
Hexachloroethane	1.72	0.125	mg/kg wet	2.500		69	40-140	2	30	
Indeno(1,2,3-cd)Pyrene	1.69	0.250	mg/kg wet	2.500		68	40-140	1	30	
Isophorone	1.85	0.250	mg/kg wet	2.500		74	40-140	0.2	30	
Naphthalene	1.72	0.250	mg/kg wet	2.500		69	40-140	2	30	
Nitrobenzene	1.84	0.250	mg/kg wet	2.500		74	40-140	2	30	
N-Nitrosodimethylamine	1.62	0.250	mg/kg wet	2.500		65	40-140	4	30	
Pentachlorophenol	1.49	0.500	mg/kg wet	2.500		59	15-140	0.4	30	
Phenanthrene	1.92	0.250	mg/kg wet	2.500		77	40-140	0.4	30	
Phenol	1.79	0.250	mg/kg wet	2.500		72	15-140	1	30	
Pyrene	1.81	0.250	mg/kg wet	2.500		72	40-140	6	30	
Surrogate: 1,2-Dichlorobenzene-d4	1.77		mg/kg wet	2.500		71	30-130			
Surrogate: 2,4,6-Tribromophenol	3.04		mg/kg wet	3.750		81	30-130			
Surrogate: 2-Chlorophenol-d4	2.80		mg/kg wet	3.750		75	30-130			
Surrogate: 2-Fluorobiphenyl	1.85		mg/kg wet	2.500		74	30-130			
Surrogate: 2-Fluorophenol	2.81		mg/kg wet	3.750		75	30-130			
Surrogate: Nitrobenzene-d5	1.82		mg/kg wet	2.500		73	30-130			
Surrogate: Phenol-d6	2.80		mg/kg wet	3.750		75	30-130			
Surrogate: p-Terphenyl-d14	1.91		mg/kg wet	2.500		76	30-130			

Batch DB51442 - 3546

Blank										
1,1-Biphenyl	ND	0.025	mg/kg wet							
1,2,4-Trichlorobenzene	ND	0.250	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.
Client Project ID: 50 Tufts Street

ESS Laboratory Work Order: 25B0259

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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Semi-Volatile Organic Compounds

Batch DB51442 - 3546

1,2-Dichlorobenzene	ND	0.250	mg/kg wet
1,3-Dichlorobenzene	ND	0.250	mg/kg wet
1,4-Dichlorobenzene	ND	0.125	mg/kg wet
2,4,5-Trichlorophenol	ND	0.250	mg/kg wet
2,4,6-Trichlorophenol	ND	0.125	mg/kg wet
2,4-Dichlorophenol	ND	0.125	mg/kg wet
2,4-Dimethylphenol	ND	0.250	mg/kg wet
2,4-Dinitrophenol	ND	0.500	mg/kg wet
2,4-Dinitrotoluene	ND	0.125	mg/kg wet
2,6-Dinitrotoluene	ND	0.250	mg/kg wet
2-Chloronaphthalene	ND	0.250	mg/kg wet
2-Chlorophenol	ND	0.125	mg/kg wet
2-Methylnaphthalene	ND	0.125	mg/kg wet
2-Methylphenol	ND	0.250	mg/kg wet
2-Nitrophenol	ND	0.500	mg/kg wet
3,3'-Dichlorobenzidine	ND	0.250	mg/kg wet
3+4-Methylphenol	ND	0.250	mg/kg wet
4-Bromophenyl-phenylether	ND	0.250	mg/kg wet
4-Chloroaniline	ND	0.250	mg/kg wet
4-Nitrophenol	ND	1.00	mg/kg wet
Acenaphthene	ND	0.250	mg/kg wet
Acenaphthylene	ND	0.250	mg/kg wet
Acetophenone	ND	0.250	mg/kg wet
Aniline	ND	0.250	mg/kg wet
Anthracene	ND	0.250	mg/kg wet
Azobenzene	ND	0.250	mg/kg wet
Benzo(a)anthracene	ND	0.250	mg/kg wet
Benzo(a)pyrene	ND	0.250	mg/kg wet
Benzo(b)fluoranthene	ND	0.250	mg/kg wet
Benzo(g,h,i)perylene	ND	0.250	mg/kg wet
Benzo(k)fluoranthene	ND	0.250	mg/kg wet
bis(2-Chloroethoxy)methane	ND	0.250	mg/kg wet
bis(2-Chloroethyl)ether	ND	0.125	mg/kg wet
bis(2-chloroisopropyl)Ether	ND	0.125	mg/kg wet
bis(2-Ethylhexyl)phthalate	ND	0.250	mg/kg wet
Butylbenzylphthalate	ND	0.250	mg/kg wet
Chrysene	ND	0.250	mg/kg wet
Dibenzo(a,h)Anthracene	ND	0.125	mg/kg wet
Dibenzofuran	ND	0.250	mg/kg wet
Diethylphthalate	ND	0.250	mg/kg wet
Dimethylphthalate	ND	0.250	mg/kg wet
Di-n-butylphthalate	ND	0.250	mg/kg wet
Di-n-octylphthalate	ND	0.500	mg/kg wet
Fluoranthene	ND	0.250	mg/kg wet
Fluorene	ND	0.250	mg/kg wet

CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.
Client Project ID: 50 Tufts Street

ESS Laboratory Work Order: 25B0259

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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Semi-Volatile Organic Compounds

Batch DB51442 - 3546

Hexachlorobenzene	ND	0.125	mg/kg wet							
Hexachlorobutadiene	ND	0.250	mg/kg wet							
Hexachloroethane	ND	0.125	mg/kg wet							
Indeno(1,2,3-cd)Pyrene	ND	0.250	mg/kg wet							
Isophorone	ND	0.250	mg/kg wet							
Naphthalene	ND	0.250	mg/kg wet							
Nitrobenzene	ND	0.250	mg/kg wet							
N-Nitrosodimethylamine	ND	0.250	mg/kg wet							
Pentachlorophenol	ND	0.500	mg/kg wet							
Phenanthrene	ND	0.250	mg/kg wet							
Phenol	ND	0.250	mg/kg wet							
Pyrene	ND	0.250	mg/kg wet							
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	<i>2.13</i>		mg/kg wet	<i>2.500</i>		<i>85</i>	<i>30-130</i>			
<i>Surrogate: 2,4,6-Tribromophenol</i>	<i>3.42</i>		mg/kg wet	<i>3.750</i>		<i>91</i>	<i>30-130</i>			
<i>Surrogate: 2-Chlorophenol-d4</i>	<i>3.06</i>		mg/kg wet	<i>3.750</i>		<i>81</i>	<i>30-130</i>			
<i>Surrogate: 2-Fluorobiphenyl</i>	<i>2.18</i>		mg/kg wet	<i>2.500</i>		<i>87</i>	<i>30-130</i>			
<i>Surrogate: 2-Fluorophenol</i>	<i>3.32</i>		mg/kg wet	<i>3.750</i>		<i>89</i>	<i>30-130</i>			
<i>Surrogate: Nitrobenzene-d5</i>	<i>2.02</i>		mg/kg wet	<i>2.500</i>		<i>81</i>	<i>30-130</i>			
<i>Surrogate: Phenol-d6</i>	<i>3.21</i>		mg/kg wet	<i>3.750</i>		<i>86</i>	<i>30-130</i>			
<i>Surrogate: p-Terphenyl-d14</i>	<i>2.15</i>		mg/kg wet	<i>2.500</i>		<i>86</i>	<i>30-130</i>			

LCS

1,1-Biphenyl	1.82	0.025	mg/kg wet	2.500		73	40-140			
1,2,4-Trichlorobenzene	1.86	0.250	mg/kg wet	2.500		75	40-140			
1,2-Dichlorobenzene	1.64	0.250	mg/kg wet	2.500		66	40-140			
1,3-Dichlorobenzene	1.79	0.250	mg/kg wet	2.500		71	40-140			
1,4-Dichlorobenzene	1.70	0.125	mg/kg wet	2.500		68	40-140			
2,4,5-Trichlorophenol	1.92	0.250	mg/kg wet	2.500		77	30-130			
2,4,6-Trichlorophenol	1.89	0.125	mg/kg wet	2.500		75	30-130			
2,4-Dichlorophenol	1.80	0.125	mg/kg wet	2.500		72	30-130			
2,4-Dimethylphenol	1.81	0.250	mg/kg wet	2.500		72	30-130			
2,4-Dinitrophenol	1.73	0.500	mg/kg wet	2.500		69	15-140			
2,4-Dinitrotoluene	1.94	0.125	mg/kg wet	2.500		78	40-140			
2,6-Dinitrotoluene	1.82	0.250	mg/kg wet	2.500		73	40-140			
2-Chloronaphthalene	1.65	0.250	mg/kg wet	2.500		66	40-140			
2-Chlorophenol	1.76	0.125	mg/kg wet	2.500		70	30-130			
2-Methylnaphthalene	1.81	0.125	mg/kg wet	2.500		72	40-140			
2-Methylphenol	1.76	0.250	mg/kg wet	2.500		70	15-140			
2-Nitrophenol	1.80	0.500	mg/kg wet	2.500		72	30-130			
3,3'-Dichlorobenzidine	1.61	0.250	mg/kg wet	2.500		64	40-140			
3+4-Methylphenol	1.72	0.250	mg/kg wet	2.500		69	15-140			
4-Bromophenyl-phenylether	1.78	0.250	mg/kg wet	2.500		71	40-140			
4-Chloroaniline	1.37	0.250	mg/kg wet	2.500		55	15-140			
4-Nitrophenol	1.76	1.00	mg/kg wet	2.500		71	15-140			
Acenaphthene	1.80	0.250	mg/kg wet	2.500		72	40-140			
Acenaphthylene	1.76	0.250	mg/kg wet	2.500		70	40-140			

CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.
Client Project ID: 50 Tufts Street

ESS Laboratory Work Order: 25B0259

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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Semi-Volatile Organic Compounds

Batch DB51442 - 3546

Acetophenone	1.62	0.250	mg/kg wet	2.500		65	40-140			
Aniline	1.22	0.250	mg/kg wet	2.500		49	40-140			
Anthracene	1.88	0.250	mg/kg wet	2.500		75	40-140			
Azobenzene	1.72	0.250	mg/kg wet	2.500		69	40-140			
Benzo(a)anthracene	1.83	0.250	mg/kg wet	2.500		73	40-140			
Benzo(a)pyrene	1.98	0.250	mg/kg wet	2.500		79	40-140			
Benzo(b)fluoranthene	1.89	0.250	mg/kg wet	2.500		75	40-140			
Benzo(g,h,i)perylene	2.09	0.250	mg/kg wet	2.500		84	40-140			
Benzo(k)fluoranthene	1.93	0.250	mg/kg wet	2.500		77	40-140			
bis(2-Chloroethoxy)methane	1.81	0.250	mg/kg wet	2.500		72	40-140			
bis(2-Chloroethyl)ether	1.66	0.125	mg/kg wet	2.500		67	40-140			
bis(2-chloroisopropyl)Ether	1.68	0.125	mg/kg wet	2.500		67	40-140			
bis(2-Ethylhexyl)phthalate	1.82	0.250	mg/kg wet	2.500		73	40-140			
Butylbenzylphthalate	1.77	0.250	mg/kg wet	2.500		71	40-140			
Chrysene	1.92	0.250	mg/kg wet	2.500		77	40-140			
Dibenzo(a,h)Anthracene	2.14	0.125	mg/kg wet	2.500		86	40-140			
Dibenzofuran	1.85	0.250	mg/kg wet	2.500		74	40-140			
Diethylphthalate	1.86	0.250	mg/kg wet	2.500		74	40-140			
Dimethylphthalate	1.81	0.250	mg/kg wet	2.500		72	15-140			
Di-n-butylphthalate	1.89	0.250	mg/kg wet	2.500		76	40-140			
Di-n-octylphthalate	1.63	0.500	mg/kg wet	2.500		65	40-140			
Fluoranthene	2.00	0.250	mg/kg wet	2.500		80	40-140			
Fluorene	1.90	0.250	mg/kg wet	2.500		76	40-140			
Hexachlorobenzene	1.84	0.125	mg/kg wet	2.500		74	40-140			
Hexachlorobutadiene	1.87	0.250	mg/kg wet	2.500		75	40-140			
Hexachloroethane	1.67	0.125	mg/kg wet	2.500		67	40-140			
Indeno(1,2,3-cd)Pyrene	2.02	0.250	mg/kg wet	2.500		81	40-140			
Isophorone	1.79	0.250	mg/kg wet	2.500		71	40-140			
Naphthalene	1.77	0.250	mg/kg wet	2.500		71	40-140			
Nitrobenzene	1.75	0.250	mg/kg wet	2.500		70	40-140			
N-Nitrosodimethylamine	1.49	0.250	mg/kg wet	2.500		60	40-140			
Pentachlorophenol	1.52	0.500	mg/kg wet	2.500		61	15-140			
Phenanthrene	1.87	0.250	mg/kg wet	2.500		75	40-140			
Phenol	1.78	0.250	mg/kg wet	2.500		71	15-140			
Pyrene	1.72	0.250	mg/kg wet	2.500		69	40-140			
Surrogate: 1,2-Dichlorobenzene-d4	1.86		mg/kg wet	2.500		74	30-130			
Surrogate: 2,4,6-Tribromophenol	2.82		mg/kg wet	3.750		75	30-130			
Surrogate: 2-Chlorophenol-d4	2.69		mg/kg wet	3.750		72	30-130			
Surrogate: 2-Fluorobiphenyl	1.91		mg/kg wet	2.500		76	30-130			
Surrogate: 2-Fluorophenol	2.87		mg/kg wet	3.750		77	30-130			
Surrogate: Nitrobenzene-d5	1.82		mg/kg wet	2.500		73	30-130			
Surrogate: Phenol-d6	2.83		mg/kg wet	3.750		76	30-130			
Surrogate: p-Terphenyl-d14	1.83		mg/kg wet	2.500		73	30-130			

LCS Dup

1,1-Biphenyl	1.75	0.025	mg/kg wet	2.500		70	40-140	4	30	
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CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.
Client Project ID: 50 Tufts Street

ESS Laboratory Work Order: 25B0259

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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Semi-Volatile Organic Compounds

Batch DB51442 - 3546

1,2,4-Trichlorobenzene	1.81	0.250	mg/kg wet	2.500		72	40-140	3	30	
1,2-Dichlorobenzene	1.63	0.250	mg/kg wet	2.500		65	40-140	0.9	30	
1,3-Dichlorobenzene	1.65	0.250	mg/kg wet	2.500		66	40-140	8	30	
1,4-Dichlorobenzene	1.66	0.125	mg/kg wet	2.500		66	40-140	2	30	
2,4,5-Trichlorophenol	1.84	0.250	mg/kg wet	2.500		74	30-130	4	30	
2,4,6-Trichlorophenol	1.80	0.125	mg/kg wet	2.500		72	30-130	4	30	
2,4-Dichlorophenol	1.76	0.125	mg/kg wet	2.500		71	30-130	2	30	
2,4-Dimethylphenol	1.73	0.250	mg/kg wet	2.500		69	30-130	5	30	
2,4-Dinitrophenol	1.65	0.500	mg/kg wet	2.500		66	15-140	5	30	
2,4-Dinitrotoluene	1.83	0.125	mg/kg wet	2.500		73	40-140	6	30	
2,6-Dinitrotoluene	1.77	0.250	mg/kg wet	2.500		71	40-140	3	30	
2-Chloronaphthalene	1.57	0.250	mg/kg wet	2.500		63	40-140	5	30	
2-Chlorophenol	1.73	0.125	mg/kg wet	2.500		69	30-130	2	30	
2-Methylnaphthalene	1.74	0.125	mg/kg wet	2.500		70	40-140	4	30	
2-Methylphenol	1.68	0.250	mg/kg wet	2.500		67	15-140	5	30	
2-Nitrophenol	1.73	0.500	mg/kg wet	2.500		69	30-130	4	30	
3,3'-Dichlorobenzidine	1.77	0.250	mg/kg wet	2.500		71	40-140	9	30	
3+4-Methylphenol	1.68	0.250	mg/kg wet	2.500		67	15-140	3	30	
4-Bromophenyl-phenylether	1.72	0.250	mg/kg wet	2.500		69	40-140	3	30	
4-Chloroaniline	1.39	0.250	mg/kg wet	2.500		56	15-140	2	30	
4-Nitrophenol	1.65	1.00	mg/kg wet	2.500		66	15-140	6	30	
Acenaphthene	1.74	0.250	mg/kg wet	2.500		70	40-140	4	30	
Acenaphthylene	1.71	0.250	mg/kg wet	2.500		68	40-140	3	30	
Acetophenone	1.56	0.250	mg/kg wet	2.500		62	40-140	4	30	
Aniline	1.20	0.250	mg/kg wet	2.500		48	40-140	2	30	
Anthracene	1.83	0.250	mg/kg wet	2.500		73	40-140	3	30	
Azobenzene	1.72	0.250	mg/kg wet	2.500		69	40-140	0.4	30	
Benzo(a)anthracene	1.77	0.250	mg/kg wet	2.500		71	40-140	3	30	
Benzo(a)pyrene	1.95	0.250	mg/kg wet	2.500		78	40-140	2	30	
Benzo(b)fluoranthene	1.83	0.250	mg/kg wet	2.500		73	40-140	3	30	
Benzo(g,h,i)perylene	1.98	0.250	mg/kg wet	2.500		79	40-140	5	30	
Benzo(k)fluoranthene	1.89	0.250	mg/kg wet	2.500		76	40-140	2	30	
bis(2-Chloroethoxy)methane	1.71	0.250	mg/kg wet	2.500		68	40-140	5	30	
bis(2-Chloroethyl)ether	1.71	0.125	mg/kg wet	2.500		68	40-140	2	30	
bis(2-chloroisopropyl)Ether	1.62	0.125	mg/kg wet	2.500		65	40-140	3	30	
bis(2-Ethylhexyl)phthalate	1.72	0.250	mg/kg wet	2.500		69	40-140	6	30	
Butylbenzylphthalate	1.71	0.250	mg/kg wet	2.500		69	40-140	4	30	
Chrysene	1.87	0.250	mg/kg wet	2.500		75	40-140	3	30	
Dibenzo(a,h)Anthracene	2.04	0.125	mg/kg wet	2.500		82	40-140	5	30	
Dibenzofuran	1.81	0.250	mg/kg wet	2.500		72	40-140	2	30	
Diethylphthalate	1.80	0.250	mg/kg wet	2.500		72	40-140	3	30	
Dimethylphthalate	1.75	0.250	mg/kg wet	2.500		70	15-140	3	30	
Di-n-butylphthalate	1.81	0.250	mg/kg wet	2.500		72	40-140	5	30	
Di-n-octylphthalate	1.55	0.500	mg/kg wet	2.500		62	40-140	5	30	
Fluoranthene	1.94	0.250	mg/kg wet	2.500		78	40-140	3	30	

CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.
Client Project ID: 50 Tufts Street

ESS Laboratory Work Order: 25B0259

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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Semi-Volatile Organic Compounds

Batch DB51442 - 3546

Fluorene	1.82	0.250	mg/kg wet	2.500		73	40-140	4	30	
Hexachlorobenzene	1.80	0.125	mg/kg wet	2.500		72	40-140	2	30	
Hexachlorobutadiene	1.83	0.250	mg/kg wet	2.500		73	40-140	2	30	
Hexachloroethane	1.65	0.125	mg/kg wet	2.500		66	40-140	1	30	
Indeno(1,2,3-cd)Pyrene	1.97	0.250	mg/kg wet	2.500		79	40-140	2	30	
Isophorone	1.68	0.250	mg/kg wet	2.500		67	40-140	6	30	
Naphthalene	1.71	0.250	mg/kg wet	2.500		69	40-140	4	30	
Nitrobenzene	1.67	0.250	mg/kg wet	2.500		67	40-140	5	30	
N-Nitrosodimethylamine	1.41	0.250	mg/kg wet	2.500		57	40-140	5	30	
Pentachlorophenol	1.48	0.500	mg/kg wet	2.500		59	15-140	2	30	
Phenanthrene	1.84	0.250	mg/kg wet	2.500		74	40-140	2	30	
Phenol	1.75	0.250	mg/kg wet	2.500		70	15-140	2	30	
Pyrene	1.69	0.250	mg/kg wet	2.500		68	40-140	1	30	
Surrogate: 1,2-Dichlorobenzene-d4	1.82		mg/kg wet	2.500		73	30-130			
Surrogate: 2,4,6-Tribromophenol	2.84		mg/kg wet	3.750		76	30-130			
Surrogate: 2-Chlorophenol-d4	2.71		mg/kg wet	3.750		72	30-130			
Surrogate: 2-Fluorobiphenyl	1.88		mg/kg wet	2.500		75	30-130			
Surrogate: 2-Fluorophenol	2.80		mg/kg wet	3.750		75	30-130			
Surrogate: Nitrobenzene-d5	1.76		mg/kg wet	2.500		70	30-130			
Surrogate: Phenol-d6	2.79		mg/kg wet	3.750		74	30-130			
Surrogate: p-Terphenyl-d14	1.78		mg/kg wet	2.500		71	30-130			

TCLP Semivolatile Compounds

Batch DB51306 - 3520C

Blank

1,4-Dichlorobenzene	ND	0.0250	mg/L							
2,4,5-Trichlorophenol	ND	0.0500	mg/L							
2,4,6-Trichlorophenol	ND	0.0500	mg/L							
2,4-Dinitrotoluene	ND	0.0500	mg/L							
2-Methylphenol	ND	0.0500	mg/L							
3+4-Methylphenol	ND	0.100	mg/L							
Hexachlorobenzene	ND	0.0500	mg/L							
Hexachlorobutadiene	ND	0.0250	mg/L							
Hexachloroethane	ND	0.0250	mg/L							
Nitrobenzene	ND	0.0500	mg/L							
Pentachlorophenol	ND	0.250	mg/L							
Pyridine	ND	0.500	mg/L							
Surrogate: 1,2-Dichlorobenzene-d4	0.406		mg/L	0.5000		81	30-130			
Surrogate: 2,4,6-Tribromophenol	0.729		mg/L	0.7500		97	15-110			
Surrogate: 2-Chlorophenol-d4	0.622		mg/L	0.7500		83	15-110			
Surrogate: 2-Fluorobiphenyl	0.454		mg/L	0.5000		91	30-130			
Surrogate: 2-Fluorophenol	0.591		mg/L	0.7500		79	15-110			
Surrogate: Nitrobenzene-d5	0.438		mg/L	0.5000		88	30-130			
Surrogate: Phenol-d6	0.650		mg/L	0.7500		87	15-110			
Surrogate: p-Terphenyl-d14	0.460		mg/L	0.5000		92	30-130			

CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.
Client Project ID: 50 Tufts Street

ESS Laboratory Work Order: 25B0259

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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TCLP Semivolatile Compounds

Batch DB51306 - 3520C

LCS

1,4-Dichlorobenzene	0.0920	0.0067	mg/L	0.1333		69	40-140			
2,4,5-Trichlorophenol	0.131	0.0133	mg/L	0.1333		99	30-130			
2,4,6-Trichlorophenol	0.127	0.0133	mg/L	0.1333		95	30-130			
2,4-Dinitrotoluene	0.134	0.0133	mg/L	0.1333		101	40-140			
2-Methylphenol	0.117	0.0133	mg/L	0.1333		88	15-140			
3+4-Methylphenol	0.118	0.0267	mg/L	0.1333		89	15-140			
Hexachlorobenzene	0.123	0.0133	mg/L	0.1333		93	40-140			
Hexachlorobutadiene	0.114	0.0067	mg/L	0.1333		85	40-140			
Hexachloroethane	0.0932	0.0067	mg/L	0.1333		70	40-140			
Nitrobenzene	0.114	0.0133	mg/L	0.1333		86	40-140			
Pentachlorophenol	0.122	0.0667	mg/L	0.1333		92	15-140			
Pyridine	0.104	0.133	mg/L	0.1333		78	40-140			
Surrogate: 1,2-Dichlorobenzene-d4	0.118		mg/L	0.1333		88	30-130			
Surrogate: 2,4,6-Tribromophenol	0.201		mg/L	0.2000		101	15-110			
Surrogate: 2-Chlorophenol-d4	0.178		mg/L	0.2000		89	15-110			
Surrogate: 2-Fluorobiphenyl	0.125		mg/L	0.1333		94	30-130			
Surrogate: 2-Fluorophenol	0.172		mg/L	0.2000		86	15-110			
Surrogate: Nitrobenzene-d5	0.119		mg/L	0.1333		89	30-130			
Surrogate: Phenol-d6	0.184		mg/L	0.2000		92	15-110			
Surrogate: p-Terphenyl-d14	0.124		mg/L	0.1333		93	30-130			

LCS Dup

1,4-Dichlorobenzene	0.0909	0.0067	mg/L	0.1333		68	40-140	1	20	
2,4,5-Trichlorophenol	0.131	0.0133	mg/L	0.1333		98	30-130	0.5	20	
2,4,6-Trichlorophenol	0.127	0.0133	mg/L	0.1333		95	30-130	0.1	20	
2,4-Dinitrotoluene	0.133	0.0133	mg/L	0.1333		100	40-140	0.6	20	
2-Methylphenol	0.111	0.0133	mg/L	0.1333		83	15-140	6	20	
3+4-Methylphenol	0.113	0.0267	mg/L	0.1333		84	15-140	5	20	
Hexachlorobenzene	0.119	0.0133	mg/L	0.1333		90	40-140	3	20	
Hexachlorobutadiene	0.108	0.0067	mg/L	0.1333		81	40-140	6	20	
Hexachloroethane	0.0871	0.0067	mg/L	0.1333		65	40-140	7	20	
Nitrobenzene	0.110	0.0133	mg/L	0.1333		83	40-140	3	20	
Pentachlorophenol	0.122	0.0667	mg/L	0.1333		91	15-140	0.2	20	
Pyridine	0.113	0.133	mg/L	0.1333		85	40-140	8	20	
Surrogate: 1,2-Dichlorobenzene-d4	0.112		mg/L	0.1333		84	30-130			
Surrogate: 2,4,6-Tribromophenol	0.196		mg/L	0.2000		98	15-110			
Surrogate: 2-Chlorophenol-d4	0.168		mg/L	0.2000		84	15-110			
Surrogate: 2-Fluorobiphenyl	0.123		mg/L	0.1333		92	30-130			
Surrogate: 2-Fluorophenol	0.156		mg/L	0.2000		78	15-110			
Surrogate: Nitrobenzene-d5	0.114		mg/L	0.1333		86	30-130			
Surrogate: Phenol-d6	0.172		mg/L	0.2000		86	15-110			
Surrogate: p-Terphenyl-d14	0.121		mg/L	0.1333		90	30-130			

CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.

Client Project ID: 50 Tufts Street

ESS Laboratory Work Order: 25B0259

Notes and Definitions

Z18	Temperature is not within 23 +/-2 °C.
Z17	Temperature is within 23 +/-2 °C.
U	Analyte included in the analysis, but not detected
SC	Surrogate recovery(ies) outside of criteria. Reextraction/Reanalysis confirms results (SC).
Q	Calibration required quadratic regression (Q).
ICV+	Initial Calibration Verification recovery is above upper control limit (ICV+).
ICV-	Initial Calibration Verification recovery is below lower control limit (ICV-).
IC	Internal Standard(s) outside of criteria. Sample was reanalyzed to confirm (IC).
EL	Elevated Method Reporting Limits due to sample matrix (EL).
D	Diluted.
CD+	Continuing Calibration %Diff/Drift is above control limit (CD+).
B+	Blank Spike recovery is above upper control limit (B+).
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report
RL	Reporting Limit
EDL	Estimated Detection Limit
MF	Membrane Filtration
MPN	Most Probable Number
TNTC	Too numerous to Count
CFU	Colony Forming Units

CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.
Client Project ID: 50 Tufts Street

ESS Laboratory Work Order: 25B0259

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Rhode Island Potable and Non Potable Water: LAI00179
<http://www.health.ri.gov/find/labs/analytical/ESS.pdf>

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutOfStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI00002
<http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml>

Massachusetts Potable and Non Potable Water: M-RI002
<http://public.dep.state.ma.us/Labcert/Labcert.aspx>

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
<http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm>

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
<http://www.wadsworth.org/labcert/elap/comm.html>

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

Pennsylvania: 68-01752
<http://www.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx>

ESS Laboratory Sample and Cooler Receipt Checklist

Client: GEI Consultants, Inc. - TB

ESS Project ID: 25B0259

Date Received: 2/11/2025

Shipped/Delivered Via: ESS Courier

Project Due Date: 2/18/2025

Days for Project: 5 Day

1. Air bill manifest present? ☐ No
Air No.: NA

6. Does COC match bottles? ☐ Yes

2. Were custody seals present? ☐ No

7. Is COC complete and correct? ☐ Yes

3. Is radiation count <100 CPM? ☐ Yes

8. Were samples received intact? ☐ Yes

4. Is a Cooler Present? ☐ Yes
Temp: 0.7 Iced with: Ice

9. Were labs informed about short holds & rushes? ☒ Yes / No / NA

10. Were any analyses received outside of hold time? ☒ Yes / No

5. Was COC signed and dated by client? ☐ Yes

11. Any Subcontracting needed? ☒ Yes / No
ESS Sample IDs: _____
Analysis: _____
TAT: _____

12. Were VOAs received? ☒ Yes / No
a. Air bubbles in aqueous VOAs? ☒ Yes / No
b. Does methanol cover soil completely? ☒ Yes / No / NA

13. Are the samples properly preserved? ☒ Yes / No
a. If metals preserved upon receipt: ☒ Yes / No Date: _____
b. If dissolved metals are requested, are they: ☒ Yes / No Field Filtered
c. Low Level VOA vials frozen: ☒ Yes / No Date: _____

Time: _____ By/Acid Lot#: _____
Yes / No To Be Lab Filtered
Time: _____ By: _____

Sample Receiving Notes:

14. Was there a need to contact Project Manager? ☒ Yes / No
a. Was there a need to contact the client? ☒ Yes / No
Who was contacted? _____ Date: _____ Time: _____ By: _____

Resolution:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
1	639286	Yes	N/A	Yes	4 oz. Jar	NP	
1	639287	Yes	N/A	Yes	4 oz. Jar	NP	
1	639288	Yes	N/A	Yes	4 oz. Jar	NP	
1	639289	Yes	N/A	Yes	VOA Vial	MeOH	

2nd Review

Were all containers scanned into storage/lab?

Initials TD

Are barcode labels on correct containers?

☒ Yes / No

Are all Flashpoint stickers attached/container ID # circled?

☒ Yes / No / NA

Are all Hex Chrome stickers attached?

☒ Yes / No / NA

Are all QC stickers attached?

☒ Yes / No / NA

Are VOA stickers attached if bubbles noted?

☒ Yes / No / NA

Completed

By: Clayton Davis

Date & Time: 2/11/25 1553.

Reviewed

By: DOJ

Date & Time: 2/11/25 1607

Appendix E Boring and Monitoring Well Installation Logs

BORING INFORMATION

LOCATION: Capuano School

GROUND SURFACE EL. (ft): NM

VERTICAL DATUM: NM

TOTAL DEPTH (ft): 15.0

LOGGED BY: N. Troccoli

DATE START/END: 1/3/2025

DRILLING COMPANY: Northern Drill Service, Inc.

DRILLER NAME: Jake

RIG TYPE: Geoprobe 6620DT

BORING**MW301**

PAGE 1 of 1

DRILLING INFORMATION

HAMMER TYPE: Automatic

CASING I.D./O.D.: NA / NA

CORE BARREL TYPE: Macrocore

AUGER I.D./O.D.: NA / NA

DRILL ROD O.D.: NM

CORE BARREL I.D./O.D. NA / NA

DRILLING METHOD: Direct Push

WATER LEVEL DEPTHS (ft): Not measured

ABBREVIATIONS:

Pen. = Penetration Length
 Rec. = Recovery Length
 RQD = Rock Quality Designation
 = Length of Sound Cores > 4 in / Pen., %
 WOR = Weight of Rods
 WOH = Weight of Hammer

S = Split Spoon Sample
 C = Core Sample
 U = Undisturbed Sample
 SC = Sonic Core
 DP = Direct Push Sample
 HSA = Hollow-Stem Auger

Qp = Pocket Penetrometer Strength
 Sv = Pocket Torvane Shear Strength
 LL = Liquid Limit
 PI = Plasticity Index
 PID = Photoionization Detector
 I.D./O.D. = Inside Diameter/Outside Diameter

NA, NM = Not Applicable, Not Measured
 Blows per 6 in.: 140-lb hammer falling
 30 inches to drive a 2-inch-O.D.
 split spoon sampler.

Elev. (ft)	Depth (ft)	Sample Information				Drilling Remarks/ Field Test Data	Layer Name	Soil and Rock Description
		Drive No.	Depth (ft)	Pen./ Rec. (in)	Blows per 6 in. or RQD			
		S1	0 to 5	60/0	NA			S1 (0-60"): Air knife, no recovery.
	5	S2	5 to 10	60/48	NA PUSH	S2 (0-48") PID =0.0 ppm	CLAY	S2 (0-48") LEAN CLAY (CL): ~95% Low plastic fines, ~5% fine sand, no odor, light brown/gray.
	10	S3	10 to 15	60/56	NA PUSH	S3 (0-46") PID =0.0 ppm		S3 (0-46") LEAN CLAY (CL): ~95% Low plastic fines, ~5% fine sand, no odor, light brown/gray.
	15					S3 (46-56") PID =0.0 ppm	SAND	S3 (46-56") WIDELY GRADED SAND WITH SILT AND GRAVEL (SW-SM): ~60% Fine to coarse sand, ~30% gravel up to 1", ~10% nonplastic fines, no odor, brown.
								End of boring at 15'.

NOTES: Monitoring well installed and screened from 5-15'.

PROJECT NAME: Tufts St

CITY/STATE: Somerville, Massachusetts

GEI PROJECT NUMBER: 045163



Groundwater Well Installation Log				MW301	
Project	Tufts St			GEI Proj. No.	045163
City / Town	Somerville, MA			Location	Between Capuano
Client	Unifirst				School and Garden
Contractor	Northern Drill Service				
Driller	Jake	GEI Rep.	N. Troccoli	Install Date	1/3/2025

Survey Datum:	NA		Length of Surface Casing above Ground	Flushmount	
Ground Elevation:	NM		Dist. Top of Surf. Casing to Top of Riser Pipe	~4"	

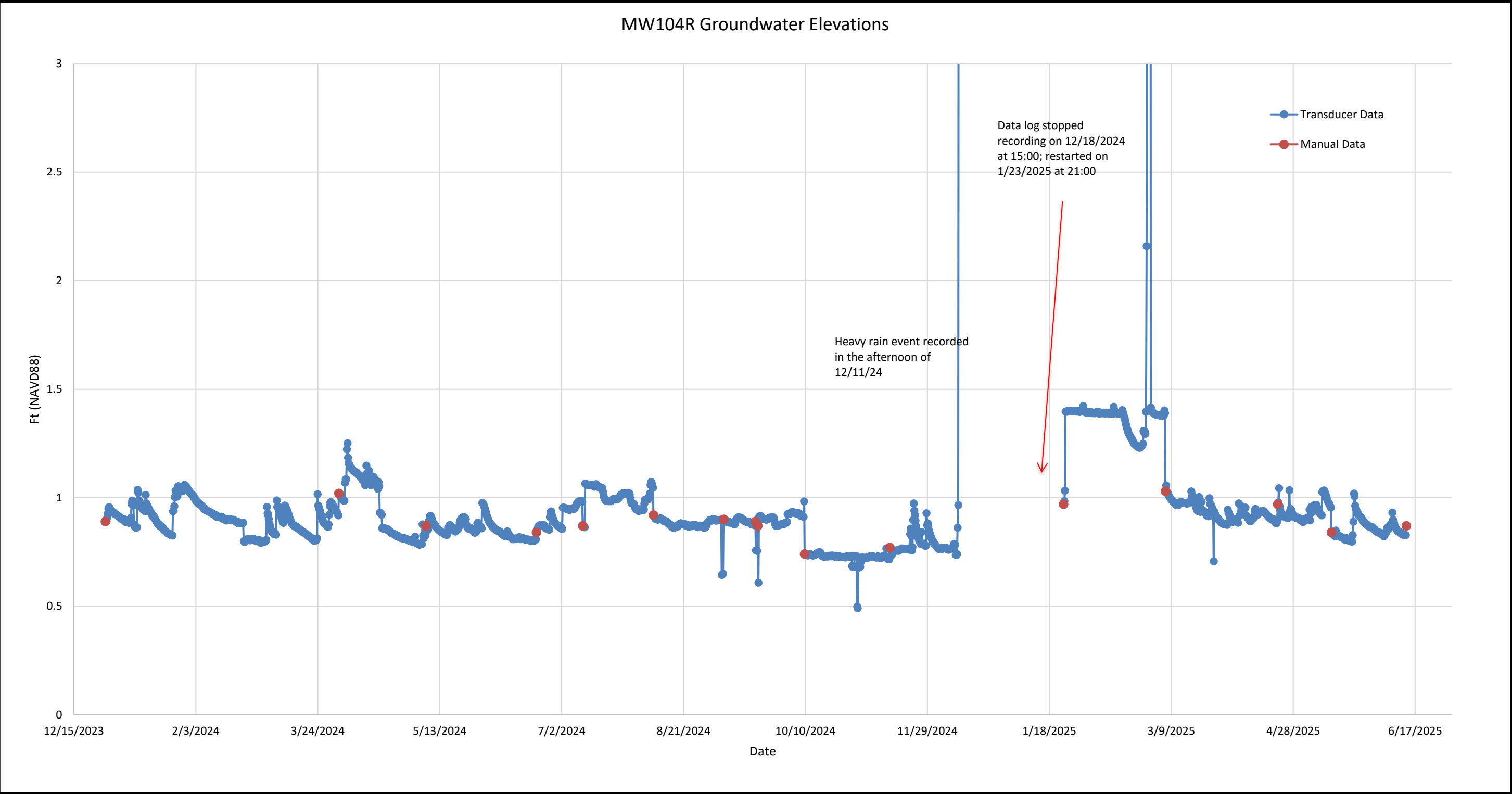
Date	Time	Distance to ▼ below top of riser pipe
1/8/2025	12:00	13.34'

General Soil Conditions (Not to Scale)

Type and Thickness of Seal around Surface Casing	Cement
ID of Surface Casing	3.5"
Type of Surface Casing	Roadbox
Depth Bottom of Surface Casing	~1.5'
ID and OD of Riser Pipe	2"/2.375"
Type of Riser Pipe	Sch. 40 PVC
Type of Backfill around Riser Pipe	Sand
Diameter of Borehole	4"
Depth Top of Seal	1'
Type of Seal	Bentonite
Depth Bottom of Seal	3'
Depth Top of Screened Section	5'
Type of Screen	Sch. 40 PVC
Description of Screen Openings	0.010" Slotted
ID and OD of Screened Section	2"/2.375"
Type of Filter Material	No. 2 Sand
Depth Bottom of Screened Section	15'
Depth Bottom of Silt Trap	15'
Depth Bottom of Filter Material	15'
Depth Top of Seal	NA
Type of Seal	NA
Depth Bottom of Seal	NA
Type of Backfill below Filter Material	NA
Bottom of Borehole	15'

Notes:
 NA = not applicable
 NM = not measured

Appendix F Transducer Data Graphs



Phase V Status Report No. 28 and
Remedial Monitoring Report No. 43
50 Tufts Street, Somerville, Massachusetts

UniFirst Corporation
Wilmington, Massachusetts

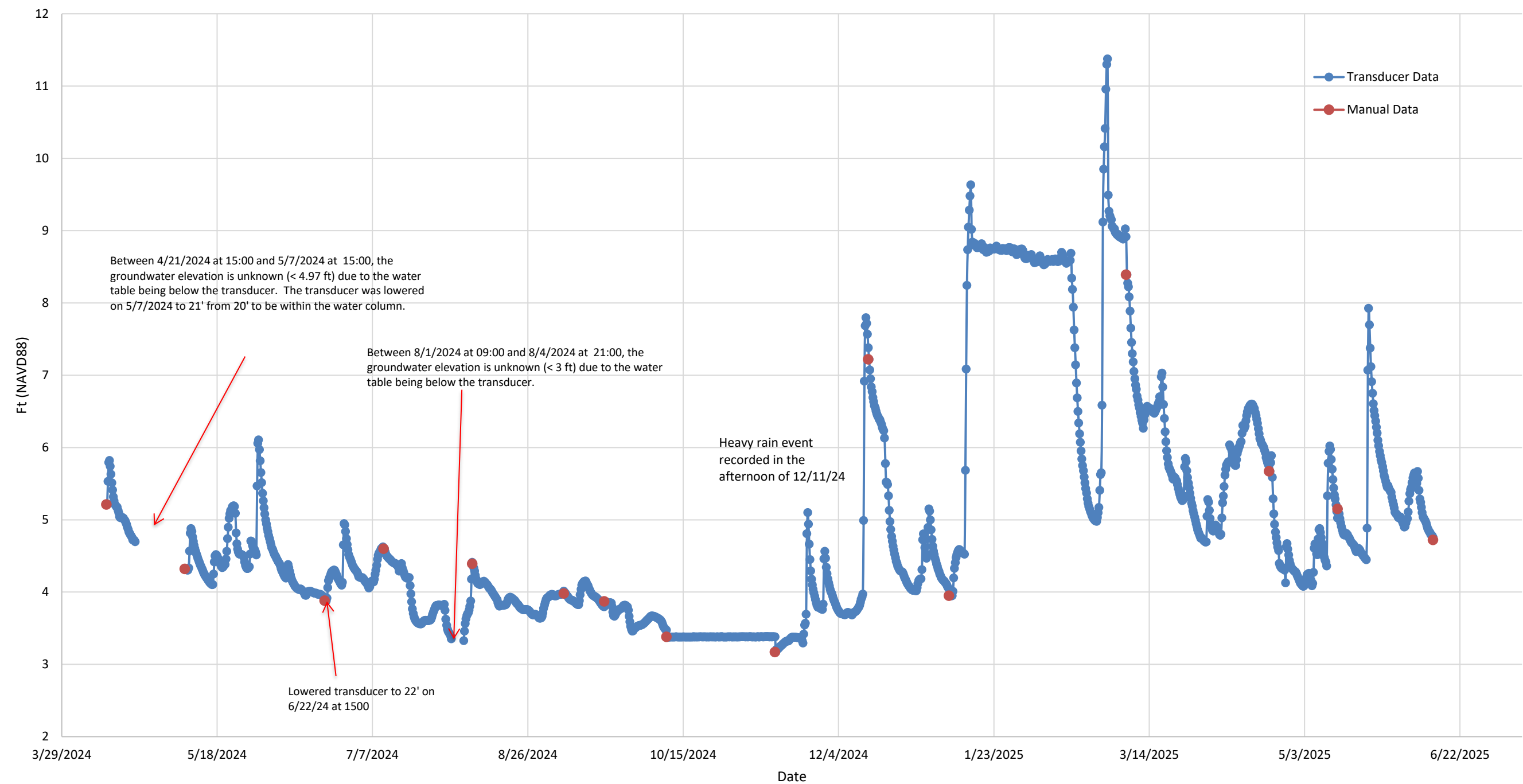


Project 04516-3

MW104R Transducer Data

August 2025

MW203R Groundwater Elevations



Phase V Status Report No. 28 and
Remedial Monitoring Report No. 43
50 Tufts Street, Somerville, Massachusetts

UniFirst Corporation
Wilmington, Massachusetts

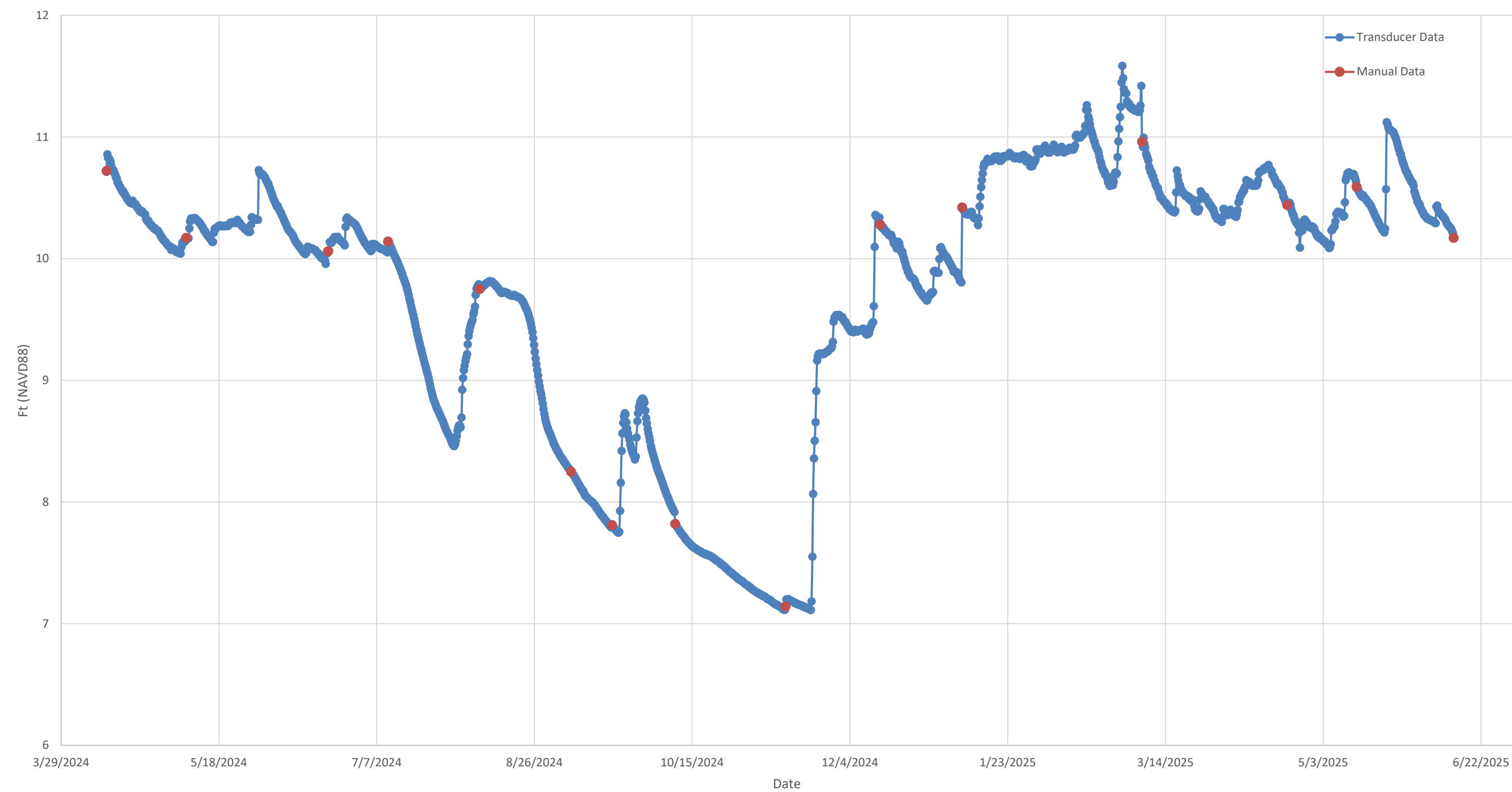


Project 04516-3

MW203R Transducer Data

August 2025

SHMW2R Groundwater Elevations



Phase V Status Report No. 28 and
Remedial Monitoring Report No. 43
50 Tufts Street, Somerville, Massachusetts

UniFirst Corporation
Wilmington, Massachusetts



Project 04516-3

SH-MW2R Transducer Data

August 2025

Appendix G Pre-Sampling Checklists and Air Sampling Checklist

SUB-SLAB MONITORING POINT INSTALLATION LOG



Sub-Slab Monitoring
Point IDs:

SV1, SV2

Project Name: 21 Morton St

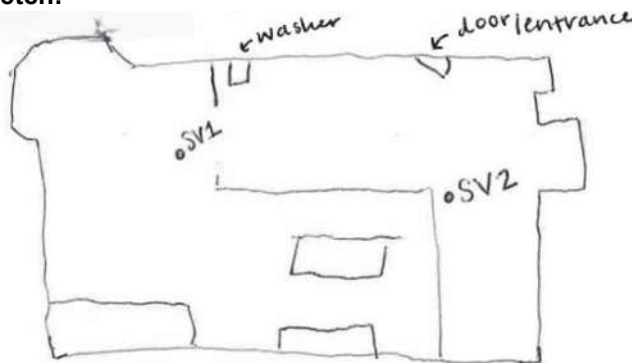
Project Number: 045163

Address: 21 Morton St, Somerville, MA

Date: 2/19/2025

Logged By: J. Graff

Basement Sketch:



Ceiling Height: ~7'

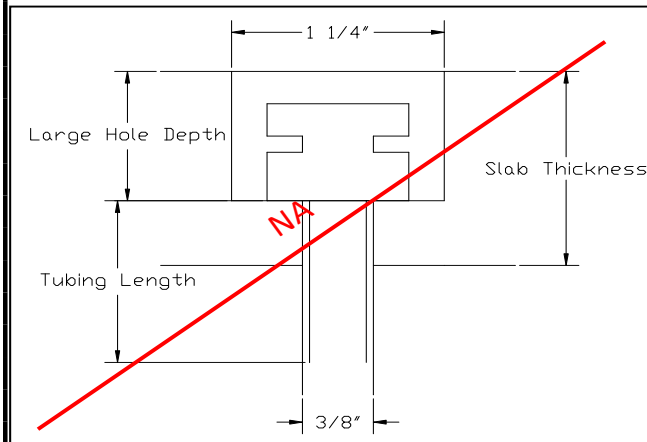
Basement Height Above
Grade: NA

Include: Wall lengths, sump dimension and location, dimensions and locations of any significant penetrations in the ground, sub-slab monitoring point locations, location of sealed vs. non-sealed walls, north arrow

Basement Sketch for Photo Log:

NA

Sub-Slab Monitoring Point Profile:



	SV1	SV2		
Slab Thickness:	1"	2"		
Tubing Length:	NA	NA		
Type of Material Under Slab:	soil	soil		
Large Hole Depth:	NA	NA		

Comments:

- installed stainless steel Mini VaporPin® in points
- NA = not applicable

SUB-SLAB MONITORING POINT INSTALLATION LOG



Sub-Slab Monitoring
Point IDs:

SV1

Project Name: 156 Glen St

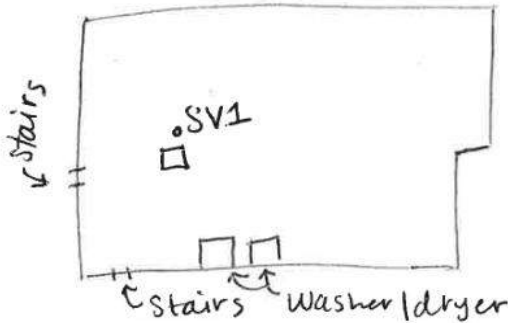
Project Number: 045163

Address: 156 Glen St, Somerville, MA

Date: 2/19/2025

Logged By: J. Graff

Basement Sketch:



Ceiling Height: ~7'

Basement Height Above

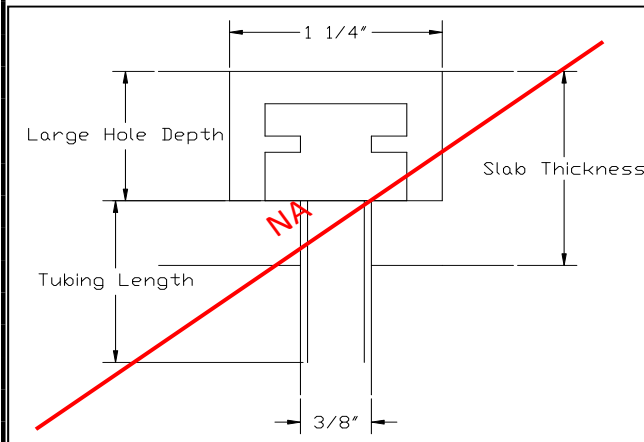
Grade: NA

Include: Wall lengths, sump dimension and location, dimensions and locations of any significant penetrations in the ground, sub-slab monitoring point locations, location of sealed vs. non-sealed walls, north arrow

Basement Sketch for Photo Log:

NA

Sub-Slab Monitoring Point Profile:



	SV2			
Slab Thickness:	3.75"			
Tubing Length:	NA			
Type of Material Under Slab:	soil			
Large Hole Depth:	NA			

Comments:

- installed stainless steel Mini VaporPin® in point
- NA = not applicable
- 156 Glen basement is separated from 21 Morton St, but in the same building



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
10 Morton St - First Floor

Sample ID: 045163-10MORT-1

Date: 3/17/25 to 3/18/25

Sampling personnel: J. Graff

Summa Canister ID: 4250

Flow Regulator ID: 02871

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 0933 (3/17/25)

Sampling Finish Time: 0933 (3/18/25)

During Sampling	
Time	Vacuum
0933	-29.97
0920	-9.39
0933	-9.23

Did Summa canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): Flow Controller: -29.97 in. Hg (0.00 before opening)

Pressure gauge reading (After sample collected): Flow Controller: -9.23 in. Hg

Environmental Conditions (Outside):	Before Sampling	After Sampling
Temperature (°F):	55	41
Barometric Pressure (in. Hg):	29.80	30.03
Prevailing Wind Direction:	SSW	N
General Weather Conditions:	Rain	Sunny

Environmental Conditions (At Sample Location):	Before Sampling	After Sampling
Temperature (°F):	68	68
Barometric Pressure (in. Hg):	29.79	30.01

PID readings at sample location (ppmv): 0.1

Photographs taken before sampling? Yes **If Yes, what time:** **Taken by:** JWG

Photographs taken after sampling? Yes **If Yes, what time:** **Taken by:** JWG

Was the building aired out prior to sample collection? No **If yes, how long?**

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? Yes

Were any of the residents home during sampling? Yes **If yes, provide detail:** Owners, construction workers

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:**

Air intake at ~4'10".

Basement Ceiling Height (to joists): Front _____ ; Back _____.

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process. Also, note the usage of the basement (storage only, laundry, etc.):



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
10 Morton St - Basement

Sample ID: 045163-10MORT-B

Date: 3/17/25 to 3/18/25

Sampling personnel: J. Graff

Summa Canister ID: 1778

Flow Regulator ID: 02779

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 0938 (3/17/25)

Sampling Finish Time: 0938 (3/18/25)

During Sampling	
Time	Vacuum
0938	-29.77
0925	-8.65
0938	-8.48

Did Summa canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): Flow Controller: -29.77 in. Hg (0.00 before opening)

Pressure gauge reading (After sample collected): Flow Controller: -8.48 in. Hg

Environmental Conditions (Outside):	Before Sampling	After Sampling
Temperature (°F):	55	41
Barometric Pressure (in. Hg):	29.80	30.03
Prevailing Wind Direction:	SSW	N
General Weather Conditions:	Rain	Sunny

Environmental Conditions (At Sample Location):	Before Sampling	After Sampling
Temperature (°F):	68	68
Barometric Pressure (in. Hg):	29.80	30.02

PID readings at sample location (ppmv): 0.0

Photographs taken before sampling? Yes **If Yes, what time:** **Taken by:** JWG

Photographs taken after sampling? Yes **If Yes, what time:** **Taken by:** JWG

Was the building aired out prior to sample collection? No **If yes, how long?**

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? Yes

Were any of the residents home during sampling? Yes **If yes, provide detail:** Owners, construction workers

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:**

Air intake at ~4'10".

Basement Ceiling Height (to joists): Front _____ ; Back _____.

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process. Also, note the usage of the basement (storage only, laundry, etc.):



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
11 Morton - First Floor

Sample ID: 045163-11MORT-1

Date: 4/7/2025 to 4/8/2025

Sampling personnel: J. Graff

Summa Canister ID: 984

Flow Regulator ID: 01133

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 0916 (4/7/2025)

Sampling Finish Time: 0911 (4/8/25)

During Sampling	
Time	Vacuum
0916	-30.55
0911	-6.67

Did Summa canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): Flow Controller: -30.55 in. Hg (0.00 before opening)

Pressure gauge reading (After sample collected): Flow Controller: -6.67 in. Hg

Environmental Conditions (Outside):	Before Sampling	After Sampling
Temperature (°F):	38	39
Barometric Pressure (in. Hg):	29.90	29.58
Prevailing Wind Direction:	NE	SW
General Weather Conditions:	Rain	Rain/Drizzle

Environmental Conditions (At Sample Location):	Before Sampling	After Sampling
Temperature (°F):	70	70
Barometric Pressure (in. Hg):	29.88	29.55

PID readings at sample location (ppmv):	0.0	NM
---	-----	----

Photographs taken before sampling? Yes **If Yes, what time:** **Taken by:** JWG

Photographs taken after sampling? No **If Yes, what time:** **Taken by:**

Was the building aired out prior to sample collection? No **If yes, how long?**

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? Yes

Were any of the residents home during sampling? Yes **If yes, provide detail:** 2 adults, 3 children

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:**

Air intake at ~4'10".

Basement Ceiling Height (to joists): Front _____ ; Back _____.

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process. Also, note the usage of the basement (storage only, laundry, etc.):



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
11 Morton St - Basement

Sample ID: 045163-11MORT-B

Date: 4/7/25 to 4/8/25

Sampling personnel: J. Graff

Summa Canister ID: 4747

Flow Regulator ID: 01919

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 0920 (4/7/25)

Sampling Finish Time: 0912 (4/8/25)

During Sampling	
Time	Vacuum
0920	-30.63
0912	-0.16

Did Summa canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): Flow Controller: -30.63 in. Hg (0.00 before opening)

Pressure gauge reading (After sample collected): Flow Controller: -0.16 in. Hg

Environmental Conditions (Outside):	Before Sampling	After Sampling
Temperature (°F):	38	39
Barometric Pressure (in. Hg):	29.90	29.58
Prevailing Wind Direction:	NE	SW
General Weather Conditions:	Rain	Rain/Drizzle

Environmental Conditions (At Sample Location):	Before Sampling	After Sampling
Temperature (°F):	68	68
Barometric Pressure (in. Hg):	29.88	29.55

PID readings at sample location (ppmv):	0.1	NM
---	-----	----

Photographs taken before sampling? Yes **If Yes, what time:** **Taken by:** JWG

Photographs taken after sampling? No **If Yes, what time:** **Taken by:**

Was the building aired out prior to sample collection? No **If yes, how long?**

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? Yes

Were any of the residents home during sampling? Yes **If yes, provide detail:** 2 adults, 3 children

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:**

Air intake at ~4'10".

Basement Ceiling Height (to joists): Front _____ ; Back _____.

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process. Also, note the usage of the basement (storage only, laundry, etc.): Laundry in basement



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
11 Morton - First Floor

Sample ID: 045163-11MORT-F1

Date: 5/6/2025 to 5/7/2025

Sampling personnel: D. Miller

Summa Canister ID: 2809

Flow Regulator ID: 0245

Sample Type / Analysis Method: TO15/Summa

5/6/2025

Sampling Start Time: 09:03 (5/6/2025)

5/7/2025

Sampling Finish Time: 09:03 (5/7/25)

During Sampling	
Time	Vacuum
9:03	-30.76
8:36	-9.01
9:03	-8.6

Did Summa canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): Flow Controller: -30.76 in. Hg (0.00 before opening)

Pressure gauge reading (After sample collected): Flow Controller: -8.60 in. Hg

Environmental Conditions (Outside):

Before Sampling

After Sampling

Temperature (°F): 57
Barometric Pressure (in. Hg): 30.22
Prevailing Wind Direction: E
General Weather Conditions: cloudy

61
29.98
S
mostly cloudy

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

Temperature (°F): 68
Barometric Pressure (in. Hg): 30.22

68
29.98

PID readings at sample location (ppmv): 0.0

Photographs taken before sampling? Yes **If Yes, what time:** **Taken by:**

Photographs taken after sampling? No **If Yes, what time:** **Taken by:**

Was the building aired out prior to sample collection? No **If yes, how long?**

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? Yes

Were any of the residents home during sampling? Yes **If yes, provide detail:** 2 adults, 3 children

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:**

Air intake at ~4'10".

Basement Ceiling Height (to joists): Front _____ ; Back _____.

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process. Also, note the usage of the basement (storage only, laundry, etc.):



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
11 Morton St - Basement

Sample ID: 045163-11MORT-B

Date: 5/6/2025 to 5/7/2025

Sampling personnel: D. Miller

Summa Canister ID: 3144

Flow Regulator ID: 02261

Sample Type / Analysis Method: TO15/Summa

5/6/2025

Sampling Start Time: 09:07 (5/6/2025)

5/7/2025

Sampling Finish Time: 09:07 (5/7/25)

During Sampling	
Time	Vacuum
9:07	-30.57
8:34	-11.54
9:07	-11.14

Did Summa canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): Flow Controller: -30.57 in. Hg (0.00 before opening)

Pressure gauge reading (After sample collected): Flow Controller: -11.14 in. Hg

Environmental Conditions (Outside):

Before Sampling

After Sampling

Temperature (°F): 57
Barometric Pressure (in. Hg): 30.22
Prevailing Wind Direction: E
General Weather Conditions: cloudy

61
29.98
S
mostly cloudy

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

Temperature (°F): 68
Barometric Pressure (in. Hg): 30.22

65
29.98

PID readings at sample location (ppmv): 0.1

Photographs taken before sampling? Yes **If Yes, what time:** **Taken by:**

Photographs taken after sampling? No **If Yes, what time:** **Taken by:**

Was the building aired out prior to sample collection? No **If yes, how long?**

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? Yes

Were any of the residents home during sampling? Yes **If yes, provide detail:** 2 adults, 3 children

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:**

Air intake at ~4'10".

Basement Ceiling Height (to joists): Front _____ ; Back _____.

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process. Also, note the usage of the basement (storage only, laundry, etc.): Laundry in basement, half is finished (collected sample in finished area)



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
17 Knowlton - First Floor

Sample ID: 045163-17knowl-F1

Date: 3/5/25-3/6/25

Sampling personnel: J. Graff, N. Troccoli

Summa Canister ID: 4334

Flow Regulator ID: 01101

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 1004 (3/5/25)

Sampling Finish Time: 1004 (3/6/25)

During Sampling	
Time	Vacuum
1004	-30.23
1004	-5.54

Did Summa canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): Flow Controller: -30.23 in. Hg (0.00 before opening)

Pressure gauge reading (After sample collected): Flow Controller: -5.54 in. Hg

Environmental Conditions (Outside):	Before Sampling	After Sampling
Temperature (°F):	51	53
Barometric Pressure (in. Hg):	29.94	29.25
Prevailing Wind Direction:	SSW	SSW
General Weather Conditions:	Damp/Drizzle	Cloudy

Environmental Conditions (At Sample Location):	Before Sampling	After Sampling
Temperature (°F):	~70	~70
Barometric Pressure (in. Hg):	29.90	29.21

PID readings at sample location (ppm): 0.1

Photographs taken before sampling? Yes **If Yes, what time:** **Taken by:** JWG

Photographs taken after sampling? No **If Yes, what time:** **Taken by:**

Was the building aired out prior to sample collection? No **If yes, how long?**

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? Yes

Were any of the residents home during sampling? Yes **If yes, provide detail:** Residents

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:**

Air intake at ~5'.

Basement Ceiling Height (to joists): Front _____; Back _____.

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process. Also, note the usage of the basement (storage only, laundry, etc.):



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
17 Knowlton - Basement

Sample ID: 045163-17knowl-B

Date: 3/5/25-3/6/25

Sampling personnel: J. Graff, N. Troccoli

Summa Canister ID: 2770

Flow Regulator ID: 0266

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 1007 (3/5/2025)

Sampling Finish Time: 1007 (3/6/2025)

During Sampling	
Time	Vacuum
1007	-30.39
1007	-9.38

Did Summa canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): Flow Controller: -30.29 in. Hg (0.00 before opening)

Pressure gauge reading (After sample collected): Flow Controller: -9.38 in. Hg

Environmental Conditions (Outside):	Before Sampling	After Sampling
Temperature (°F):	51	53
Barometric Pressure (in. Hg):	29.94	29.25
Prevailing Wind Direction:	SSW	SSW
General Weather Conditions:	Damp/Drizzle	Cloudy

Environmental Conditions (At Sample Location):	Before Sampling	After Sampling
Temperature (°F):	~68	~68
Barometric Pressure (in. Hg):	29.90	29.21

PID readings at sample location (ppm): 0.0

Photographs taken before sampling? Yes **If Yes, what time:** Taken by: JWG

Photographs taken after sampling? No **If Yes, what time:** Taken by:

Was the building aired out prior to sample collection? No **If yes, how long?**

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? Yes

Were any of the residents home during sampling? Yes **If yes, provide detail:** Residents

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:**

Air intake at ~5'.

Basement Ceiling Height (to joists): Front _____; Back _____.

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process. Also, note the usage of the basement (storage only, laundry, etc.):



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
19-19A Morton - First Floor

Sample ID: 045163-19MORT-1

Date: 2/26/2025 to 2/27/2025

Sampling personnel: J. Graff

Summa Canister ID: 5192

Flow Regulator ID: 0096

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 1100 (2/26/2025)

Sampling Finish Time: 1052 (2/27/2025)

During Sampling	
Time	Vacuum
1100	-28.71
1052	-3.37

Did Summa canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): Flow Controller: -28.71 in. Hg (0.00 before opening)

Pressure gauge reading (After sample collected): Flow Controller: -3.37 in. Hg

Environmental Conditions (Outside):

Before Sampling

After Sampling

Temperature (°F): 47
Barometric Pressure (in. Hg): 29.77
Prevailing Wind Direction: WNW
General Weather Conditions: Sunny

41
29.78
SE
Drizzle

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

Temperature (°F): 70-72
Barometric Pressure (in. Hg): 29.74

70-72
29.74

PID readings at sample location (ppmv): 0.0

Photographs taken before sampling? Yes **If Yes, what time:** **Taken by:** JWG

Photographs taken after sampling? No **If Yes, what time:** **Taken by:**

Was the building aired out prior to sample collection? No **If yes, how long?**

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? Yes **If yes, provide detail:** Adult residents, cats

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:**

Air intake at ~4'10".

Basement Ceiling Height (to joists): Front _____ ; Back _____.

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process. Also, note the usage of the basement (storage only, laundry, etc.):



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
19-19A Morton - First Floor

Sample ID: 045163-19MORT-1

Date: 2/26/2025 to 2/27/2025

Sampling personnel: J. Graff

Summa Canister ID: 2976

Flow Regulator ID: 0632

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 1104 (2/26/2025)

Sampling Finish Time: 1055 (2/27/2025)

During Sampling	
Time	Vacuum
1104	-30.06
1055	-6.26

Did Summa canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): Flow Controller: -30.06 in. Hg (0.00 before opening)

Pressure gauge reading (After sample collected): Flow Controller: -6.26 in. Hg

Environmental Conditions (Outside):

Before Sampling

After Sampling

Temperature (°F): 47
Barometric Pressure (in. Hg): 29.77
Prevailing Wind Direction: WNW
General Weather Conditions: Sunny

41
29.78
SE
Drizzle

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

Temperature (°F): 68-70
Barometric Pressure (in. Hg): 29.74

68-70
29.73

PID readings at sample location (ppmv): 0.0

Photographs taken before sampling? Yes If Yes, what time: Taken by: JWG

Photographs taken after sampling? No If Yes, what time: Taken by:

Was the building aired out prior to sample collection? No If yes, how long?

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? Yes If yes, provide detail: Adult residents, cats

Did any of the occupants NOT follow instruction for residents? No If yes, describe below:

Air intake at ~4'10".

Basement Ceiling Height (to joists): Front _____ ; Back _____.

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process. Also, note the usage of the basement (storage only, laundry, etc.):



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
21 Morton St (First Floor)

Sample ID: 045163-21Mort-FF1

Date: 2/18/2025 to 2/19/2025

Sampling personnel: J. Graff, N. Troccoli

Summa Canister ID: 3955

Flow Regulator ID: 01887

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 1101 (2/18/2025)

Sampling Finish Time: 1101 (2/19/2025)

2/18/2025

2/19/2025

During Sampling	
Time	Vacuum
1101	-30.65
1057	-7.66
1101	-7.55

Did Summa canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): Flow Controller: -30.65 in. Hg (0.00 before opening)

Pressure gauge reading (After sample collected): Flow Controller: -7.55 in. Hg (0.00 after closing)

Environmental Conditions (Outside):

Before Sampling

After Sampling

Temperature (°F): ~21°F
Barometric Pressure (in. Hg): 29.94
Prevailing Wind Direction: W
General Weather Conditions: Sunny/Clear

~21°F
30.19
WNW
Sunny/Clear

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

Temperature (°F): ~72°F
Barometric Pressure (in. Hg): 29.87

~72°F
30.14

PID readings at sample location (ppmv): 0.1

Photographs taken before sampling? Yes If Yes, what time: Taken by: JWG

Photographs taken after sampling? No If Yes, what time: Taken by:

Was the building aired out prior to sample collection? No If yes, how long?

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? Yes If yes, provide detail: The residents at night

Did any of the occupants NOT follow instruction for residents? No If yes, describe below:

Air intake at ~4'10".

Basement Ceiling Height (to joists): Front _____ ; Back _____.

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process. Also, note the usage of the basement (storage only, laundry, etc.):



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
21 Morton (Basement)

Sample ID: 045163-21Mort-B1

Date: 2/18/2025 to 2/19/2025

Sampling personnel: J. Graff, N. Troccoli

Summa Canister ID: 2931

Flow Regulator ID: 0821

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 1105 (2/18/2025)

Sampling Finish Time: 1105 (2/19/2025)

2/18/2025

2/19/2025

2/19/2025

During Sampling	
Time	Vacuum
1105	-30.81
1102	-9.30
1105	-9.26

Did Summa canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): Flow Controller: -30.81 in. Hg (0.00 before opening)

Pressure gauge reading (After sample collected): Flow Controller: -9.26 in. Hg (0.00 after closing)

Environmental Conditions (Outside):

Before Sampling

After Sampling

Temperature (°F): ~21°F
Barometric Pressure (in. Hg): 29.94
Prevailing Wind Direction: W
General Weather Conditions: Sunny/Clear

~21°F
30.19
WNW
Sunny/Clear

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

Temperature (°F): ~60°F
Barometric Pressure (in. Hg): 29.89

~60°F
30.15

PID readings at sample location (ppmv): 0.1

Photographs taken before sampling? Yes **If Yes, what time:** Taken by: JWG

Photographs taken after sampling? No **If Yes, what time:** Taken by:

Was the building aired out prior to sample collection? No **If yes, how long?**

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? No **If yes, provide detail:**

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:**

Air intake at ~4'10".

Basement Ceiling Height (to joists): Front _____ ; Back _____.

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process. Also, note the usage of the basement (storage only, laundry, etc.): Basement used for storage. Laundry in basement, may or may not be active.



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
156 Glen (First Floor)

Sample ID: 045163-21Mort-FF1

Date: 2/18/2025 to 2/19/2025

Sampling personnel: J. Graff, N. Troccoli

Summa Canister ID: 1858

Flow Regulator ID: 02267

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 1109 (2/18/2025)

Sampling Finish Time: 1109 (2/19/2025)

2/18/2025

2/19/2025

2/19/2025

During Sampling	
Time	Vacuum
1109	-30.48
1107	-9.51
1109	-9.48

Did Summa canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): Flow Controller: -30.48 in. Hg (0.00 before opening)

Pressure gauge reading (After sample collected): Flow Controller: -9.48 in. Hg (0.00 after closing)

Environmental Conditions (Outside):

Before Sampling

After Sampling

Temperature (°F): ~21°F
Barometric Pressure (in. Hg): 29.94
Prevailing Wind Direction: W
General Weather Conditions: Sunny/Clear

~21°F
30.19
WNW
Sunny/Clear

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

Temperature (°F): ~72°F
Barometric Pressure (in. Hg): 29.89

~72°F
30.15

PID readings at sample location (ppmv): 0.1

Photographs taken before sampling? Yes **If Yes, what time:** Taken by: JWG

Photographs taken after sampling? No **If Yes, what time:** Taken by:

Was the building aired out prior to sample collection? No **If yes, how long?**

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? Yes **If yes, provide detail:** Two adults

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:**

Air intake at ~4'10".

Basement Ceiling Height (to joists): Front _____ ; Back _____.

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process. Also, note the usage of the basement (storage only, laundry, etc.):



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
Basement of 156 Glen St

Sample ID: 045163-156Glen-B1

Date: 2/18/2025 to 2/19/2025

Sampling personnel: J. Graff, N. Troccoli

Summa Canister ID: 2918

Flow Regulator ID: 0498

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 1113 (2/18/2025)

Sampling Finish Time: 1113 (2/19/2025)

2/18/2025

2/19/2025

During Sampling	
Time	Vacuum
1113	-29.55
1113	-6.90

Did Summa canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): Flow Controller: -29.55 in. Hg (0.00 before opening)

Pressure gauge reading (After sample collected): Flow Controller: -6.90 in. Hg (0.00 after closing)

Environmental Conditions (Outside):

Before Sampling

After Sampling

Temperature (°F): ~21°F
Barometric Pressure (in. Hg): 29.94
Prevailing Wind Direction: W
General Weather Conditions: Sunny/Clear

~21°F
30.18
W
Sunny/Clear

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

Temperature (°F): ~66°F
Barometric Pressure (in. Hg): 29.89

~66°F
30.14

PID readings at sample location (ppmv): 0 to 0.1

Photographs taken before sampling? Yes If Yes, what time: Taken by: NMT

Photographs taken after sampling? No If Yes, what time: Taken by:

Was the building aired out prior to sample collection? No If yes, how long?

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? No If yes, provide detail:

Did any of the occupants NOT follow instruction for residents? No If yes, describe below:

Air intake at ~4'10".

Basement Ceiling Height (to joists): Front _____ ; Back _____.

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process. Also, note the usage of the basement (storage only, laundry, etc.): Basement used for storage and laundry.



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
31 Tufts St Unit 104

Sample ID: 045163-31Tuft-IA1

Date: 2/18/2025 to 2/19/2025

Sampling personnel: J. Graff, N. Troccoli

Summa Canister ID: 1965

Flow Regulator ID: 0140

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 1018 (2/18/2025)

Sampling Finish Time: 1018 (2/19/2025)

2/18/2025

2/19/2025

During Sampling	
Time	Vacuum
1018	-30.86
1018	-4.32

Did Summa canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): Flow Controller: -30.86 in. Hg (0.00 before opening)

Pressure gauge reading (After sample collected): Flow Controller: -4.32 in. Hg (0.00 after closing)

Environmental Conditions (Outside):

Before Sampling

After Sampling

Temperature (°F): ~20°F
Barometric Pressure (in. Hg): 29.94
Prevailing Wind Direction: W
General Weather Conditions: Sunny/Clear

~18°F
30.19
WNW
Sunny/Clear

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

Temperature (°F): ~72°F
Barometric Pressure (in. Hg): 29.87

~72°F
30.14

PID readings at sample location (ppmv):

0.0

0.1

Photographs taken before sampling? Yes If Yes, what time: Taken by: NMT

Photographs taken after sampling? No If Yes, what time: Taken by:

Was the building aired out prior to sample collection? No If yes, how long?

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? Yes If yes, provide detail: 2 toddlers, 1 adult

Did any of the occupants NOT follow instruction for residents? No If yes, describe below:

Air intake at ~4'10".

Basement Ceiling Height (to joists): Front _____ ; Back _____.

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process. Also, note the usage of the basement (storage only, laundry, etc.):



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
31 Tufts St Unit 101

Sample ID: 045163-31Tuft-IA2

Date: 2/18/2025 to 2/19/2025

Sampling personnel: J. Graff, N. Troccoli

Summa Canister ID: 1564

Flow Regulator ID: 0962

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 1007 (2/18/2025)

Sampling Finish Time: 1007 (2/19/2025)

2/18/2025

2/19/2025

2/19/2025

During Sampling	
Time	Vacuum
1007	-30.75
1005	-7.98
1007	-7.92

Did Summa canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): Flow Controller: -30.75 in. Hg (0.00 before opening)

Pressure gauge reading (After sample collected): Flow Controller: -7.92 in. Hg (0.00 after closing)

Environmental Conditions (Outside):

Before Sampling

After Sampling

Temperature (°F): ~20°F
Barometric Pressure (in. Hg): 29.94
Prevailing Wind Direction: W
General Weather Conditions: Sunny/Clear

~18°F
30.19
WNW
Sunny/Clear

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

Temperature (°F): ~72°F
Barometric Pressure (in. Hg): 29.89

~72°F
30.15

PID readings at sample location (ppmv):

0.0

0.1

Photographs taken before sampling? Yes **If Yes, what time:** **Taken by:** JWG

Photographs taken after sampling? Yes **If Yes, what time:** **Taken by:** JWG

Was the building aired out prior to sample collection? No **If yes, how long?**

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? Yes **If yes, provide detail:** Residents live in apartment

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:**

Air intake at ~5'.

Basement Ceiling Height (to joists): Front _____ ; Back _____.

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process. Also, note the usage of the basement (storage only, laundry, etc.):



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
31 Tufts St Sprinkler
Room/Utility Closet

Sample ID: 045163-31Tuft-IA3

Date: 2/18/2025 to 2/19/2025

Sampling personnel: J. Graff, N. Troccoli

Summa Canister ID: 4331

Flow Regulator ID: 01059

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 1004 (2/18/2025)

Sampling Finish Time: 1004 (2/19/2025)

2/18/2025

2/19/2025

2/19/2025

During Sampling	
Time	Vacuum
1004	-30.36
0955	-8.74
1004	-8.57

Did Summa canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): Flow Controller: -30.36 in. Hg (0.00 before opening)

Pressure gauge reading (After sample collected): Flow Controller: -8.57 in. Hg (0.00 after closing)

Environmental Conditions (Outside):

Before Sampling

After Sampling

Temperature (°F):
Barometric Pressure (in. Hg):
Prevailing Wind Direction:
General Weather Conditions:

~20°F
29.94
W
Sunny/Clear

~18°F
30.19
WNW
Sunny/Clear

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

Temperature (°F):
Barometric Pressure (in. Hg):

~66-68°F
29.89

~66-68°F
30.15

PID readings at sample location (ppmv):

0.0

0.0

Photographs taken before sampling? Yes **If Yes, what time:** **Taken by:** JWG

Photographs taken after sampling? Yes **If Yes, what time:** **Taken by:** NMT

Was the building aired out prior to sample collection? No **If yes, how long?**

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? No **If yes, provide detail:**

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:**

Air intake at ~5'5".

Basement Ceiling Height (to joists): Front _____ ; Back _____.

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process. Also, note the usage of the basement (storage only, laundry, etc.):



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
31 Tufts St Unit 103

Sample ID: 045163-31Tuft-IA4

Date: 2/18/2025 to 2/19/2025

Sampling personnel: J. Graff, N. Troccoli

Summa Canister ID: 48327

Flow Regulator ID: 01885

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 1014 (2/18/2025)

Sampling Finish Time: 1014 (2/19/2025)

2/18/2025

2/19/2025

During Sampling	
Time	Vacuum
1014	-30.42
1014	-7.97

Did Summa canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): Flow Controller: -30.42 in. Hg (0.00 before opening)

Pressure gauge reading (After sample collected): Flow Controller: -7.97 in. Hg (0.00 after closing)

Environmental Conditions (Outside):

Before Sampling

After Sampling

Temperature (°F): ~20°F
Barometric Pressure (in. Hg): 29.94
Prevailing Wind Direction: W
General Weather Conditions: Sunny/Clear

~18°F
30.19
WNW
Sunny/Clear

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

Temperature (°F): ~72°F
Barometric Pressure (in. Hg): 29.87

~72°F
30.14

PID readings at sample location (ppmv):

0.0

0.1

Photographs taken before sampling? Yes **If Yes, what time:** Taken by: JWG

Photographs taken after sampling? No **If Yes, what time:** Taken by:

Was the building aired out prior to sample collection? No **If yes, how long?**

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? No **If yes, provide detail:**

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:**

Air intake at ~4'10".

Basement Ceiling Height (to joists): Front _____ ; Back _____.

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process. Also, note the usage of the basement (storage only, laundry, etc.):



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
31 Tufts St Unit 102

Sample ID: 045163-31Tuft-IA5

Date: 2/18/2025 to 2/19/2025

Sampling personnel: J. Graff, N. Troccoli

Summa Canister ID: 1532

Flow Regulator ID: 0120

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 1012 (2/18/2025)

Sampling Finish Time: 1012 (2/19/2025)

2/18/2025

2/19/2025

2/19/2025

During Sampling	
Time	Vacuum
1012	-30.56
1008	-6.50
1012	-6.38

Did Summa canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): Flow Controller: -30.56 in. Hg (0.00 before opening)

Pressure gauge reading (After sample collected): Flow Controller: -6.38 in. Hg (0.00 after closing)

Environmental Conditions (Outside):

Before Sampling

After Sampling

Temperature (°F): ~20°F
Barometric Pressure (in. Hg): 29.94
Prevailing Wind Direction: W
General Weather Conditions: Sunny/Clear

~18°F
30.19
WNW
Sunny/Clear

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

Temperature (°F): ~72°F
Barometric Pressure (in. Hg): 29.87

~72°F
30.15

PID readings at sample location (ppmv):

0 to 0.1

0.1

Photographs taken before sampling? Yes If Yes, what time: Taken by: NMT

Photographs taken after sampling? No If Yes, what time: Taken by:

Was the building aired out prior to sample collection? No If yes, how long?

Windows open? Yes Ventilation fans? No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? Yes If yes, provide detail: 1 adult (resident)

Did any of the occupants NOT follow instruction for residents? No If yes, describe below:

Air intake at ~4'10".

Basement Ceiling Height (to joists): Front _____ ; Back _____.

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process. Also, note the usage of the basement (storage only, laundry, etc.): Window cracked for duration of sampling



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
32 Knowlton - Basement

Sample ID: 045163-32KNOW-B

Date: 2/27/2025 to 2/28/2025

Sampling personnel: J. Graff

Summa Canister ID: 1850

Flow Regulator ID: 0240

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 1033 (2/27/2025)

Sampling Finish Time: 1028 (2/28/2025)

During Sampling	
Time	Vacuum
1033	-31.42
1028	-7.70

Did Summa canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): Flow Controller: -31.42 in. Hg (0.00 before opening)

Pressure gauge reading (After sample collected): Flow Controller: -7.70 in. Hg

Environmental Conditions (Outside):	Before Sampling	After Sampling
Temperature (°F):	41	43
Barometric Pressure (in. Hg):	29.78	29.60
Prevailing Wind Direction:	SE	WNW
General Weather Conditions:	Drizzle/Cloudy	Sunny

Environmental Conditions (At Sample Location):	Before Sampling	After Sampling
Temperature (°F):	72	72
Barometric Pressure (in. Hg):	29.77	29.54

PID readings at sample location (ppmv): 0.0

Photographs taken before sampling? Yes **If Yes, what time:** **Taken by:** JWG

Photographs taken after sampling? No **If Yes, what time:** **Taken by:**

Was the building aired out prior to sample collection? No **If yes, how long?**

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? Yes **If yes, provide detail:** Residents

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:** 2 adult residents

Air intake at ~4'10".

Basement Ceiling Height (to joists): Front _____ ; Back _____.

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process. Also, note the usage of the basement (storage only, laundry, etc.):



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
32 Knowlton - First Floor
(living room)

Sample ID: 045163-32KNOW-1

Date: 2/27/2025 to 2/28/2025

Sampling personnel: J. Graff

Summa Canister ID: 2932

Flow Regulator ID: 01284

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 1036 (2/27/2025)

Sampling Finish Time: 1030 (2/28/2025)

During Sampling	
Time	Vacuum
1036	-30.34
1030	-9.15

Did Summa canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): Flow Controller: -30.34 in. Hg (0.00 before opening)

Pressure gauge reading (After sample collected): Flow Controller: -9.15 in. Hg (0.00 after closing)

Environmental Conditions (Outside):	Before Sampling	After Sampling
Temperature (°F):	41	43
Barometric Pressure (in. Hg):	29.78	29.60
Prevailing Wind Direction:	SE	WNW
General Weather Conditions:	Drizzle/Cloudy	Sunny

Environmental Conditions (At Sample Location):	Before Sampling	After Sampling
Temperature (°F):	72	72
Barometric Pressure (in. Hg):	29.76	29.54

PID readings at sample location (ppmv): 0.0

Photographs taken before sampling? Yes **If Yes, what time:** **Taken by:** JWG

Photographs taken after sampling? No **If Yes, what time:** **Taken by:**

Was the building aired out prior to sample collection? No **If yes, how long?**

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? Yes **If yes, provide detail:** Residents

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:** Residents

Air intake at ~4'10".

Basement Ceiling Height (to joists): Front _____ ; Back _____.

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process. Also, note the usage of the basement (storage only, laundry, etc.):



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
34 Knowlton - First Floor

Sample ID: 045163-34knowl-F1

Date: 2/24/2025 to 2/25/2025

Sampling personnel: J. Graff

Summa Canister ID: 3373

Flow Regulator ID: 01258

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 1535 (2/24/2025)

Sampling Finish Time: 1515 (2/25/2025)

During Sampling	
Time	Vacuum
1535	-30.24
1515	0.18

Did Summa canister go to ambient pressure? Yes

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): Flow Controller: -30.24 in. Hg (0.00 before opening)

Pressure gauge reading (After sample collected): Flow Controller: 0.18 in. Hg

Environmental Conditions (Outside):	Before Sampling	After Sampling
Temperature (°F):	42	52
Barometric Pressure (in. Hg):	29.99	29.70
Prevailing Wind Direction:	S	S
General Weather Conditions:	Sunny	Partly Cloudy

Environmental Conditions (At Sample Location):	Before Sampling	After Sampling
Temperature (°F):	~72°F	~72°F
Barometric Pressure (in. Hg):	29.95	29.65

PID readings at sample location (ppmv): 0.1

Photographs taken before sampling? Yes **If Yes, what time:** **Taken by:** JWG

Photographs taken after sampling? No **If Yes, what time:** **Taken by:**

Was the building aired out prior to sample collection? No **If yes, how long?**

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? Yes **If yes, provide detail:** 2 adult residents

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:**

Air intake at ~4'10".

Basement Ceiling Height (to joists): Front _____ ; Back _____.

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process. Also, note the usage of the basement (storage only, laundry, etc.): Canister was ambient upon arrival.



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
34 Knowlton - Basement

Sample ID: 045163-34knowl-B

Date: 2/24/2025 to 2/25/2025

Sampling personnel: J. Graff

Summa Canister ID: 4251

Flow Regulator ID: 02047

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 1532 (2/24/2025)

Sampling Finish Time: 1520 (2/25/2025)

During Sampling	
Time	Vacuum
1532	-29.12
1520	-5.22

Did Summa canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): Flow Controller: -29.12 in. Hg (0.00 before opening)

Pressure gauge reading (After sample collected): Flow Controller: -5.22 in. Hg

Environmental Conditions (Outside):

Before Sampling

After Sampling

Temperature (°F): 42
Barometric Pressure (in. Hg): 29.99
Prevailing Wind Direction: S
General Weather Conditions: Sunny

52
29.70
S
Partly Cloudy

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

Temperature (°F): 70
Barometric Pressure (in. Hg): 29.95

68
29.65

PID readings at sample location (ppmv): 0.0 to 0.1

Photographs taken before sampling? Yes **If Yes, what time:** **Taken by:** JWG

Photographs taken after sampling? No **If Yes, what time:** **Taken by:**

Was the building aired out prior to sample collection? No **If yes, how long?**

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? Yes **If yes, provide detail:** 2 adult residents

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:** 2 adult residents

Air intake at ~4'10".

Basement Ceiling Height (to joists): Front _____ ; Back _____.

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process. Also, note the usage of the basement (storage only, laundry, etc.):



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
34 Knowlton - First Floor

Sample ID: 045163-34knowl-F1

Date: 3/26/2025 to 3/27/2025

Sampling personnel: J. Graff

Summa Canister ID: 5409

Flow Regulator ID: 0474

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 15:30 (3/26/2025)

Sampling Finish Time: 15:30 (3/27/2025)

During Sampling	
Time	Vacuum
15:30	-30.10
15:30	-9.50

Did Summa canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): Flow Controller: -30.10 in. Hg (0.00 before opening)

Pressure gauge reading (After sample collected): Flow Controller: -9.50 in. Hg

Environmental Conditions (Outside):

Before Sampling

After Sampling

Temperature (°F): 50
Barometric Pressure (in. Hg): 29.94
Prevailing Wind Direction: W
General Weather Conditions: Sunny

47
30.04
NW
Partly Cloudy

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

Temperature (°F): ~72°F
Barometric Pressure (in. Hg): 29.90

~72°F
30.04

PID readings at sample location (ppmv): 0.2

Photographs taken before sampling? Yes **If Yes, what time:** **Taken by:** JWG

Photographs taken after sampling? No **If Yes, what time:** **Taken by:**

Was the building aired out prior to sample collection? No **If yes, how long?**

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? Yes **If yes, provide detail:** 2 adult residents

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:**

Air intake at ~4'10".

Basement Ceiling Height (to joists): Front _____ ; Back _____.

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process. Also, note the usage of the basement (storage only, laundry, etc.): Canister was ambient upon arrival.



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
93 Franklin B

Sample ID: 045163-93Franklin-B

Date: 2/27/2025 to 2/28/2025

Sampling personnel: J. Graff

Summa Canister ID: 992

Flow Regulator ID: 0008

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 1010 (2/27/2025)

Sampling Finish Time: 1002 (2/28/2025)

During Sampling	
Time	Vacuum
1010	-30.71
1002	-7.95

Did Summa canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): Flow Controller: -30.71 in. Hg (0.00 before opening)

Pressure gauge reading (After sample collected): Flow Controller: -7.95 in. Hg (0.00 after closing)

Environmental Conditions (Outside):	Before Sampling	After Sampling
Temperature (°F):	39	42
Barometric Pressure (in. Hg):	29.84	29.60
Prevailing Wind Direction:	ESE	W
General Weather Conditions:	Drizzle/Rain	Sunny

Environmental Conditions (At Sample Location):	Before Sampling	After Sampling
Temperature (°F):	70	68
Barometric Pressure (in. Hg):	29.79	29.54

PID readings at sample location (ppmv): 0.0

Photographs taken before sampling? Yes **If Yes, what time:** **Taken by:** JWG

Photographs taken after sampling? No **If Yes, what time:** **Taken by:**

Was the building aired out prior to sample collection? No **If yes, how long?**

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? Yes

Were any of the residents home during sampling? Yes **If yes, provide detail:** Residents

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:**

Air intake at ~4'10".

Basement Ceiling Height (to joists): Front _____ ; Back _____.

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process. Also, note the usage of the basement (storage only, laundry, etc.): Laundry in basement (on 93 side)



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
93 Franklin - First floor
(between living and dining
room)

Sample ID: 045163-93Franklin-1

Date: 2/27/2025 to 2/28/2025

Sampling personnel: J. Graff

Summa Canister ID: 2116

Flow Regulator ID: 02439

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 1015 (2/27/2025)

Sampling Finish Time: 1005 (2/28/2025)

During Sampling	
Time	Vacuum
1015	-30.13
1005	-9.89

Did Summa canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): Flow Controller: -30.13 in. Hg (0.00 before opening)

Pressure gauge reading (After sample collected): Flow Controller: -9.89 in. Hg (0.00 after closing)

Environmental Conditions (Outside):	Before Sampling	After Sampling
Temperature (°F):	39	42
Barometric Pressure (in. Hg):	29.84	29.60
Prevailing Wind Direction:	ESE	W
General Weather Conditions:	Drizzle/Rain	Sunny

Environmental Conditions (At Sample Location):	Before Sampling	After Sampling
Temperature (°F):	70	68
Barometric Pressure (in. Hg):	29.79	29.53

PID readings at sample location (ppmv): 0.0

Photographs taken before sampling? Yes **If Yes, what time:** **Taken by:** JWG

Photographs taken after sampling? No **If Yes, what time:** **Taken by:**

Was the building aired out prior to sample collection? No **If yes, how long?**

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? Yes

Were any of the residents home during sampling? Yes **If yes, provide detail:** Residents

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:**

Air intake at ~4'10".

Basement Ceiling Height (to joists): Front _____ ; Back _____.

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process. Also, note the usage of the basement (storage only, laundry, etc.): Laundry in basement (on 93 side)



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
91 Franklin - First floor
(hallway)

Sample ID: 045163-91Franklin-1

Date: 2/27/2025 to 2/28/2025

Sampling personnel: J. Graff

Summa Canister ID: 5190

Flow Regulator ID: 0400

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 1007 (2/27/2025)

Sampling Finish Time: 1000 (2/28/2025)

During Sampling	
Time	Vacuum
1007	-30.54
1000	-9.57

Did Summa canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): Flow Controller: -30.54 in. Hg (0.00 before opening)

Pressure gauge reading (After sample collected): Flow Controller: -9.57 in. Hg (0.00 after closing)

Environmental Conditions (Outside):	Before Sampling	After Sampling
Temperature (°F):	39	42
Barometric Pressure (in. Hg):	29.84	29.60
Prevailing Wind Direction:	ESE	W
General Weather Conditions:	Drizzle/Rain	Sunny

Environmental Conditions (At Sample Location):	Before Sampling	After Sampling
Temperature (°F):	70	70
Barometric Pressure (in. Hg):	29.79	29.54

PID readings at sample location (ppmv): 0.0

Photographs taken before sampling? Yes If Yes, what time: Taken by: JWG

Photographs taken after sampling? No If Yes, what time: Taken by:

Was the building aired out prior to sample collection? No If yes, how long?

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? Yes

Were any of the residents home during sampling? Yes If yes, provide detail: Residents

Did any of the occupants NOT follow instruction for residents? No If yes, describe below:

Air intake at ~4'10".

Basement Ceiling Height (to joists): Front _____ ; Back _____.

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process. Also, note the usage of the basement (storage only, laundry, etc.): Laundry in basement (on 93 side)



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
97 Franklin St (basement)

Sample ID: 045163-97Frank-B

Date: 2/18/2025 to 2/19/2025

Sampling personnel: J. Graff, N. Troccoli

Summa Canister ID: 3282

Flow Regulator ID: 01418

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 0827 (2/18/2025)

Sampling Finish Time: 0818 (2/19/2025)

2/18/2025

2/19/2025

During Sampling	
Time	Vacuum
0827	-29.78
0818	-3.94

Did Summa canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): Flow Controller: -29.78 in. Hg (0.00 before opening)

Pressure gauge reading (After sample collected): Flow Controller: -3.94 in. Hg (0.00 after closing)

Environmental Conditions (Outside):

Before Sampling

After Sampling

Temperature (°F): ~16°F
Barometric Pressure (in. Hg): 29.95
Prevailing Wind Direction: W
General Weather Conditions: Sunny/Clear

~15°F
30.18
WNW
Sunny/Clear

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

Temperature (°F): ~72°F
Barometric Pressure (in. Hg): 29.89

~72°F
30.17

PID readings at sample location (ppmv):

0.0

0 to 0.1

Photographs taken before sampling? Yes If Yes, what time: 0830 Taken by: JWG

Photographs taken after sampling? No If Yes, what time: Taken by:

Was the building aired out prior to sample collection? No If yes, how long?

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? Yes If yes, provide detail: 1 resident/owner

Did any of the occupants NOT follow instruction for residents? No If yes, describe below:

Air intake at ~4'10".

Basement Ceiling Height (to joists): Front _____ ; Back _____.

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process. Also, note the usage of the basement (storage only, laundry, etc.): Basement used for storage and laundry. Household cleaning chemicals near washing machine.



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
**97 Franklin St (first floor -
dining room)**

Sample ID: 045163-97Frank-1

Date: 2/18/2025 to 2/19/2025

Sampling personnel: J. Graff, N. Troccoli

Summa Canister ID: 2098

Flow Regulator ID: 01743

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 0837 (2/18/2025)

Sampling Finish Time: 0837 (2/19/2025)

2/18/2025

2/19/2025

2/19/2025

During Sampling	
Time	Vacuum
0837	-30.42
0820	-8.76
0837	-8.44

Did Summa canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): Flow Controller: -30.42 in. Hg (0.00 before opening)

Pressure gauge reading (After sample collected): Flow Controller: -8.44 in. Hg (0.00 after closing)

Environmental Conditions (Outside):

Before Sampling

After Sampling

Temperature (°F):
Barometric Pressure (in. Hg):
Prevailing Wind Direction:
General Weather Conditions:

~16°F
29.95
W
Sunny/Clear

~15°F
30.18
WNW
Sunny/Clear

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

Temperature (°F):
Barometric Pressure (in. Hg):

~70°F
29.89

~70°F
30.15

PID readings at sample location (ppmv):

0.0

0.0

Photographs taken before sampling? Yes If Yes, what time: Taken by: NMT

Photographs taken after sampling? No If Yes, what time: Taken by:

Was the building aired out prior to sample collection? No If yes, how long?

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? Yes If yes, provide detail: 1 resident/owner

Did any of the occupants NOT follow instruction for residents? No If yes, describe below:

Air intake at ~4'10".

Basement Ceiling Height (to joists): Front _____ ; Back _____.

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process. Also, note the usage of the basement (storage only, laundry, etc.):



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
97 Franklin St (second floor)

Sample ID: 045163-97Frank-2

Date: 2/18/2025 to 2/19/2025

Sampling personnel: J. Graff, N. Troccoli

Summa Canister ID: 4769

Flow Regulator ID: 01419

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 0835 (2/18/2025)

Sampling Finish Time: 0835 (2/19/2025)

2/18/2025

2/19/2025

2/19/2025

During Sampling	
Time	Vacuum
0835	-30.25
0819	-9.29
0835	-9.06

Did Summa canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): Flow Controller: -30.25 in. Hg (0.00 before opening)

Pressure gauge reading (After sample collected): Flow Controller: -9.06 in. Hg (0.00 after closing)

Environmental Conditions (Outside):

Before Sampling

After Sampling

Temperature (°F):
Barometric Pressure (in. Hg):
Prevailing Wind Direction:
General Weather Conditions:

~16°F
29.95
W
Sunny/Clear

~15°F
30.18
WNW
Sunny/Clear

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

Temperature (°F):
Barometric Pressure (in. Hg):

~70°F
29.89

~70°F
30.16

PID readings at sample location (ppmv):

0.0

0.0

Photographs taken before sampling? Yes If Yes, what time: Taken by: JWG

Photographs taken after sampling? No If Yes, what time: Taken by:

Was the building aired out prior to sample collection? No If yes, how long?

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? Yes If yes, provide detail: 1 resident/owner

Did any of the occupants NOT follow instruction for residents? No If yes, describe below:

Air intake at ~4'10".

Basement Ceiling Height (to joists): Front _____ ; Back _____.

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process. Also, note the usage of the basement (storage only, laundry, etc.):



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
103 Washington (first floor)

Sample ID: 045163-103Wash-F1

Date: 2/20/2025 to 2/21/2025

Sampling personnel: J. Graff

Summa Canister ID: 3943

Flow Regulator ID: 01381

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 1032 (2/20/2025)

Sampling Finish Time: 1015 (2/21/2025)

2/20/2025

2/21/2025

During Sampling	
Time	Vacuum
1032	-30.75
1015	-6.73

Did Summa canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): Flow Controller: -30.75 in. Hg (0.00 before opening)

Pressure gauge reading (After sample collected): Flow Controller: -6.73 in. Hg (0.00 after closing)

Environmental Conditions (Outside):

Before Sampling

After Sampling

Temperature (°F): ~22°F
Barometric Pressure (in. Hg): 29.95
Prevailing Wind Direction: NNW
General Weather Conditions: Cloudy

~28°F
29.99
NW
Partly Sunny

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

Temperature (°F): 64-66
Barometric Pressure (in. Hg): 29.89

64-66

PID readings at sample location (ppmv):

0.0

0.0

Photographs taken before sampling? Yes If Yes, what time: 1035 Taken by JWG

Photographs taken after sampling? No If Yes, what time: Taken by:

Was the building aired out prior to sample collection? No If yes, how long?

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? No If yes, provide detail:

Did any of the occupants NOT follow instruction for residents? No If yes, describe below:

Air intake at ~4'10".

Basement Ceiling Height (to joists): Front _____ ; Back _____.

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process. Also, note the usage of the basement (storage only, laundry, etc.):



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
103 Washington (first floor)

Sample ID: 045163-103Wash-F1

Date: 2/10/2025 to 2/11/2025

Sampling personnel: D. Miller

Summa Canister ID: 5405

Flow Regulator ID: 02148

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 11:10 (2/10/2025)

Sampling Finish Time: 10:42 (2/11/2025)

2/10/2025

2/11/2025

During Sampling	
Time	Vacuum
11:10	-30.54
10:42	0.16

Did Summa canister go to ambient pressure? Yes

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): Flow Controller: -30.54 in. Hg (0.00 before opening)

Pressure gauge reading (After sample collected): Flow Controller: 0.16 in. Hg (at end)

Environmental Conditions (Outside):

Before Sampling

After Sampling

Temperature (°F): ~32°F
Barometric Pressure (in. Hg): 30.27
Prevailing Wind Direction: W
General Weather Conditions: Cloudy

~29°F
30.32
W
Cloudy

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

Temperature (°F): ~67°F
Barometric Pressure (in. Hg): 30.27

~67°F
30.32

PID readings at sample location (ppmv): 0.0

Photographs taken before sampling? Yes **If Yes, what time:** **Taken by:**

Photographs taken after sampling? Yes **If Yes, what time:** **Taken by:**

Was the building aired out prior to sample collection? No **If yes, how long?**

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? No **If yes, provide detail:**

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:**

Air intake at ~4'10".

Basement Ceiling Height (to joists): Front _____ ; Back _____.

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process. Also, note the usage of the basement (storage only, laundry, etc.):

- Sample canister flow controller read ambient pressure upon arrival; shut off immediately. Laboratory confirmed ambient pressure upon receipt. Did not analyze sample.



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
103 Washington (basement)

Sample ID: 045163-103Wash-B1

Date: 2/10/2025 to 2/11/2025

Sampling personnel: D. Miller

Summa Canister ID: 5407

Flow Regulator ID: 01423

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 11:09 (2/10/2025)

Sampling Finish Time: 11:09 (2/11/2025)

2/10/2025

2/11/2025

During Sampling	
Time	Vacuum
11:09	-29.97
10:44	-7.44
11:09	-7.02

Did Summa canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): Flow Controller: -29.97 in. Hg (0.00 before opening)

Pressure gauge reading (After sample collected): Flow Controller: -7.02 in. Hg (at end)

Environmental Conditions (Outside):

Before Sampling

After Sampling

Temperature (°F): ~32°F
Barometric Pressure (in. Hg): 30.27
Prevailing Wind Direction: W
General Weather Conditions: Cloudy

~29°F
30.32
W
Cloudy

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

Temperature (°F): ~64°F
Barometric Pressure (in. Hg): 30.27

~64°F
30.32

PID readings at sample location (ppmv): 0.0

Photographs taken before sampling? Yes **If Yes, what time:** **Taken by:**

Photographs taken after sampling? Yes **If Yes, what time:** **Taken by:**

Was the building aired out prior to sample collection? No **If yes, how long?**

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? No **If yes, provide detail:**

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:**

Air intake at ~4'10".

Basement Ceiling Height (to joists): Front _____ ; Back _____.

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process. Also, note the usage of the basement (storage only, laundry, etc.):



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
103 Washington (second floor)

Sample ID: 045163-103Wash-F2

Date: 2/10/2025 to 2/11/2025

Sampling personnel: D. Miller

Summa Canister ID: 2818

Flow Regulator ID: 0842

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 11:30 (2/10/2025)

Sampling Finish Time: 11:30 (2/11/2025)

2/10/2025

2/11/2025

During Sampling	
Time	Vacuum
11:30	-30.23
10:46	-10.80
11:30	-10.12

Did Summa canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): Flow Controller: -30.23 in. Hg (0.00 before opening)

Pressure gauge reading (After sample collected): Flow Controller: -10.12 in. Hg (at end)

Environmental Conditions (Outside):

Before Sampling

After Sampling

Temperature (°F): ~32°F
Barometric Pressure (in. Hg): 30.27
Prevailing Wind Direction: W
General Weather Conditions: Cloudy

~29°F
30.32
W
Cloudy

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

Temperature (°F): ~70°F
Barometric Pressure (in. Hg): 30.27

~70°F
30.32

PID readings at sample location (ppmv): 0.0

Photographs taken before sampling? Yes **If Yes, what time:** **Taken by:**

Photographs taken after sampling? Yes **If Yes, what time:** **Taken by:**

Was the building aired out prior to sample collection? No **If yes, how long?**

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? Yes **If yes, provide detail:** units on second floor occupied

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:**

Air intake at ~4'10".

Basement Ceiling Height (to joists): Front _____ ; Back _____.

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process. Also, note the usage of the basement (storage only, laundry, etc.):

- odor of "swiffer"-like cleaning chemicals in unit at time of sampling



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
103 Washington (unit 1)

Sample ID: 045163-103Wash-Unit1

Date: 2/10/2025 to 2/11/2025

Sampling personnel: D. Miller

Summa Canister ID: 1553

Flow Regulator ID: 02794

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 11:25 (2/10/2025)

Sampling Finish Time: 11:25 (2/11/2025)

2/10/2025

2/11/2025

During Sampling

Time	Vacuum
11:25	-30.44
11:25	-8.77

Did Summa canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): Flow Controller: -30.44 in. Hg (0.00 before opening)

Pressure gauge reading (After sample collected): Flow Controller: -8.77 in. Hg (at end)

Environmental Conditions (Outside):

Before Sampling

After Sampling

Temperature (°F): ~32°F
Barometric Pressure (in. Hg): 30.27
Prevailing Wind Direction: W
General Weather Conditions: Cloudy

~29°F
30.32
W
Cloudy

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

Temperature (°F): ~70°F
Barometric Pressure (in. Hg): 30.27

~70°F
30.32

PID readings at sample location (ppmv): 0.0

Photographs taken before sampling? Yes **If Yes, what time:** **Taken by:**

Photographs taken after sampling? Yes **If Yes, what time:** **Taken by:**

Was the building aired out prior to sample collection? No **If yes, how long?**

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? Yes **If yes, provide detail:** two residents in unit

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:**

Air intake at ~4'10".

Basement Ceiling Height (to joists): Front _____ ; Back _____.

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process. Also, note the usage of the basement (storage only, laundry, etc.):



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
105 Washington (first floor)

Sample ID: 045163-105Wash-F1

Date: 2/10/2025 to 2/11/2025

Sampling personnel: D. Miller

Summa Canister ID: 5427

Flow Regulator ID: 02797

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 11:12 (2/10/2025)

Sampling Finish Time: 11:12 (2/11/2025)

2/10/2025

2/11/2025

During Sampling	
Time	Vacuum
11:12	-29.87
10:37	-10.07
11:12	-9.57

Did Summa canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): Flow Controller: -29.87 in. Hg (0.00 before opening)

Pressure gauge reading (After sample collected): Flow Controller: -9.57 in. Hg (at end)

Environmental Conditions (Outside):

Before Sampling

After Sampling

Temperature (°F): ~32°F
Barometric Pressure (in. Hg): 30.27
Prevailing Wind Direction: W
General Weather Conditions: Cloudy

~29°F
30.32
W
Cloudy

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

Temperature (°F): ~71°F
Barometric Pressure (in. Hg): 30.27

~71°F
30.32

PID readings at sample location (ppmv): 0.0

Photographs taken before sampling? Yes **If Yes, what time:** **Taken by:**

Photographs taken after sampling? Yes **If Yes, what time:** **Taken by:**

Was the building aired out prior to sample collection? No **If yes, how long?**

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? Yes **If yes, provide detail:** commercial office

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:**

Air intake at ~4'10".

Basement Ceiling Height (to joists): Front _____ ; Back _____.

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process. Also, note the usage of the basement (storage only, laundry, etc.):



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
105 Washington (second floor)

Sample ID: 045163-105Wash-F2

Date: 2/10/2025 to 2/11/2025

Sampling personnel: D. Miller

Summa Canister ID: 3315

Flow Regulator ID: 02273

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 11:19 (2/10/2025)

Sampling Finish Time: 11:19 (2/11/2025)

2/10/2025

2/11/2025

During Sampling	
Time	Vacuum
11:19	-30.43
10:39	-10.62
11:19	-10.04

Did Summa canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): Flow Controller: -30.43 in. Hg (0.00 before opening)

Pressure gauge reading (After sample collected): Flow Controller: -10.04 in. Hg (at end)

Environmental Conditions (Outside):

Before Sampling

After Sampling

Temperature (°F): ~32°F
Barometric Pressure (in. Hg): 30.27
Prevailing Wind Direction: W
General Weather Conditions: Cloudy

~29°F
30.32
W
Cloudy

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

Temperature (°F): ~68°F
Barometric Pressure (in. Hg): 30.27

~68°F
30.32

PID readings at sample location (ppmv): 0.0

Photographs taken before sampling? Yes **If Yes, what time:** **Taken by:**

Photographs taken after sampling? Yes **If Yes, what time:** **Taken by:**

Was the building aired out prior to sample collection? No **If yes, how long?**

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? Yes **If yes, provide detail:** second floor units occupied

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:**

Air intake at ~4'10".

Basement Ceiling Height (to joists): Front _____ ; Back _____.

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process. Also, note the usage of the basement (storage only, laundry, etc.):



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
105 Washington (basement)

Sample ID: 045163-105Wash-B1

Date: 2/10/2025 to 2/11/2025

Sampling personnel: D. Miller

Summa Canister ID: 3351

Flow Regulator ID: 02264

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 11:13 (2/10/2025)

Sampling Finish Time: 10:36 (2/11/2025)

2/10/2025

2/11/2025

During Sampling	
Time	Vacuum
11:13	-30.45
10:36	-1.00

Did Summa canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): Flow Controller: -30.45 in. Hg (0.00 before opening)

Pressure gauge reading (After sample collected): Flow Controller: -1.00 in. Hg (at end)

Environmental Conditions (Outside):

Before Sampling

After Sampling

Temperature (°F): ~32°F
Barometric Pressure (in. Hg): 30.27
Prevailing Wind Direction: W
General Weather Conditions: Cloudy

~29°F
30.32
W
Cloudy

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

Temperature (°F): ~68°F
Barometric Pressure (in. Hg): 30.27

~68°F
30.32

PID readings at sample location (ppmv): 0.0

Photographs taken before sampling? Yes **If Yes, what time:** **Taken by:**

Photographs taken after sampling? Yes **If Yes, what time:** **Taken by:**

Was the building aired out prior to sample collection? No **If yes, how long?**

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? Yes **If yes, provide detail:** commercial office

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:**

Air intake at ~4'10".

Basement Ceiling Height (to joists): Front _____ ; Back _____.

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process. Also, note the usage of the basement (storage only, laundry, etc.):



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
105 Washington (basement)

Sample ID: 045163-105Wash-B2

Date: 2/10/2025 to 2/11/2025

Sampling personnel: D. Miller

Summa Canister ID: 5436

Flow Regulator ID: 02771

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 11:14 (2/10/2025)

Sampling Finish Time: 11:14 (2/11/2025)

2/10/2025

2/11/2025

During Sampling	
Time	Vacuum
11:14	-29.96
10:35	-9.61
11:14	-9.02

Did Summa canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): Flow Controller: -29.96 in. Hg (0.00 before opening)

Pressure gauge reading (After sample collected): Flow Controller: -9.02 in. Hg (at end)

Environmental Conditions (Outside):

Before Sampling

After Sampling

Temperature (°F): ~32°F
Barometric Pressure (in. Hg): 30.27
Prevailing Wind Direction: W
General Weather Conditions: Cloudy

~29°F
30.32
W
Cloudy

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

Temperature (°F): ~65°F
Barometric Pressure (in. Hg): 30.27

~65°F
30.32

PID readings at sample location (ppmv): 0.0

Photographs taken before sampling? Yes **If Yes, what time:** **Taken by:**

Photographs taken after sampling? Yes **If Yes, what time:** **Taken by:**

Was the building aired out prior to sample collection? No **If yes, how long?**

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? Yes **If yes, provide detail:** commercial office

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:**

Air intake at ~4'10".

Basement Ceiling Height (to joists): Front _____ ; Back _____.

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process. Also, note the usage of the basement (storage only, laundry, etc.):



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
166 Glen First Floor (on half wall between kitchen and living room)

Sample ID: 045163-166Glen-F1

Date: 2/20/2025 to 2/21/2025

Sampling personnel: J. Graff

Summa Canister ID: 4918

Flow Regulator ID: 01929

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 0902 (2/20/2025)

Sampling Finish Time: 0902 (2/21/2025)

2/20/2025

2/21/2025

2/21/2025

During Sampling	
Time	Vacuum
0902	-30.85
0841	-9.56
0902	-9.35

Did Summa canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): Flow Controller: -30.85 in. Hg (0.00 before opening)

Pressure gauge reading (After sample collected): Flow Controller: -9.35 in. Hg (0.00 after closing)

Environmental Conditions (Outside):

Before Sampling

After Sampling

Temperature (°F): ~18°F
Barometric Pressure (in. Hg): 29.97
Prevailing Wind Direction: NW
General Weather Conditions: Mostly Cloudy

~24°F
29.98
NW
Mostly Cloudy

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

Temperature (°F): ~70°F
Barometric Pressure (in. Hg): 29.94

~70°F
29.93

PID readings at sample location (ppmv):

0.0

0.0

Photographs taken before sampling? Yes If Yes, what time: Taken by: JWG

Photographs taken after sampling? No If Yes, what time: Taken by:

Was the building aired out prior to sample collection? No If yes, how long?

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? Yes If yes, provide detail: 1-2 adults

Did any of the occupants NOT follow instruction for residents? No If yes, describe below:

Air intake at ~5'.

Basement Ceiling Height (to joists): Front _____ ; Back _____.

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process. Also, note the usage of the basement (storage only, laundry, etc.): Basement used for storage and laundry. Household cleaning chemicals near washing machine.



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
166 Glen - Basement

Sample ID: 045163-166Glen-B1

Date: 2/20/2025 to 2/21/2025

Sampling personnel: J. Graff

Summa Canister ID: 2813

Flow Regulator ID: 0226

Sample Type / Analysis Method: TO15/Summa

Sampling Start Time: 0906 (2/20/2025)

Sampling Finish Time: 0904 (2/21/2025)

2/20/2025

2/21/2025

2/21/2025

During Sampling	
Time	Vacuum
0906	-30.56
0843	-6.06
0904	-5.69

Did Summa canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): Flow Controller: -30.56 in. Hg (0.00 before opening)

Pressure gauge reading (After sample collected): Flow Controller: -5.69 in. Hg (0.43 after closing)

Environmental Conditions (Outside):

Before Sampling

After Sampling

Temperature (°F): ~18°F
Barometric Pressure (in. Hg): 29.97
Prevailing Wind Direction: NNW
General Weather Conditions: Mostly Cloudy

~24°F
29.98
NW
Mostly Cloudy

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

Temperature (°F): ~66-68°F
Barometric Pressure (in. Hg): 29.95

~66-68°F
29.94

PID readings at sample location (ppmv):

0.0

0.0

Photographs taken before sampling? Yes If Yes, what time: Taken by: JWG

Photographs taken after sampling? No If Yes, what time: Taken by:

Was the building aired out prior to sample collection? No If yes, how long?

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? No

Were any of the residents home during sampling? Yes If yes, provide detail: 1-2 adults

Did any of the occupants NOT follow instruction for residents? No If yes, describe below:

Air intake at ~4'10".

Basement Ceiling Height (to joists): Front _____ ; Back _____.

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process. Also, note the usage of the basement (storage only, laundry, etc.): Basement used for storage and laundry.



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
84 Franklin St - First Floor

Sample ID: 045163-84FRANK-F1

Date: 5/6/2025 to 5/7/2025

Sampling personnel: D. Miller

Summa Canister ID: 2655

Flow Regulator ID: 01040

Sample Type / Analysis Method: TO15/Summa

5/6/2025

Sampling Start Time: 09:40 (5/6/2025)

5/7/2025

Sampling Finish Time: 09:40 (5/7/25)

During Sampling	
Time	Vacuum
9:40	-30.91
9:24	-9.92
9:40	-9.67

Did Summa canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): Flow Controller: -30.91 in. Hg (0.00 before opening)

Pressure gauge reading (After sample collected): Flow Controller: -9.67 in. Hg

Environmental Conditions (Outside):

Before Sampling

After Sampling

Temperature (°F): 57
Barometric Pressure (in. Hg): 30.22
Prevailing Wind Direction: E
General Weather Conditions: cloudy

61
29.98
S
mostly cloudy

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

Temperature (°F): 66
Barometric Pressure (in. Hg): 30.22

67
29.98

PID readings at sample location (ppmv): 0.0

Photographs taken before sampling? Yes **If Yes, what time:** **Taken by:**

Photographs taken after sampling? No **If Yes, what time:** **Taken by:**

Was the building aired out prior to sample collection? No **If yes, how long?**

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? Yes

Were any of the residents home during sampling? Yes **If yes, provide detail:** 2 adults

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:**

Air intake at ~4'10".

Basement Ceiling Height (to joists): Front _____ ; Back _____.

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process. Also, note the usage of the basement (storage only, laundry, etc.):



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
84 Franklin St - Second Floor

Sample ID: 045163-84FRANK-F2

Date: 5/6/2025 to 5/7/2025

Sampling personnel: D. Miller

Summa Canister ID: 3906

Flow Regulator ID: 0843

Sample Type / Analysis Method: TO15/Summa

5/6/2025

Sampling Start Time: 09:37 (5/6/2025)

5/7/2025

Sampling Finish Time: 09:37 (5/7/25)

During Sampling	
Time	Vacuum
9:37	-30.68
9:17	-11.37
9:37	-11.13

Did Summa canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): Flow Controller: -30.68 in. Hg (0.00 before opening)

Pressure gauge reading (After sample collected): Flow Controller: -11.13 in. Hg

Environmental Conditions (Outside):

Before Sampling

After Sampling

Temperature (°F): 57
Barometric Pressure (in. Hg): 30.22
Prevailing Wind Direction: E
General Weather Conditions: cloudy

61
29.98
S
mostly cloudy

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

Temperature (°F): 66
Barometric Pressure (in. Hg): 30.22

67
29.98

PID readings at sample location (ppmv): 0.0

Photographs taken before sampling? Yes **If Yes, what time:** **Taken by:**

Photographs taken after sampling? No **If Yes, what time:** **Taken by:**

Was the building aired out prior to sample collection? No **If yes, how long?**

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? Yes

Were any of the residents home during sampling? Yes **If yes, provide detail:** 2 adults

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:**

Air intake at ~4'10".

Basement Ceiling Height (to joists): Front _____ ; Back _____.

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process. Also, note the usage of the basement (storage only, laundry, etc.):



AMBIENT AIR SAMPLING CHECKLIST

Sampling Location:
84 Franklin St- Basement

Sample ID: 045163-84FRANK-B

Date: 5/6/2025 to 5/7/2025

Sampling personnel: D. Miller

Summa Canister ID: 3591

Flow Regulator ID: 02439

Sample Type / Analysis Method: TO15/Summa

5/6/2025

Sampling Start Time: 09:41 (5/6/2025)

5/7/2025

Sampling Finish Time: 09:41 (5/7/25)

During Sampling	
Time	Vacuum
9:41	-30.33
9:25	-8.61
9:41	-8.40

Did Summa canister go to ambient pressure? No

Vacuum pressure reported by Laboratory: ---

Pressure gauge reading (Pre-opening): Flow Controller: -30.33 in. Hg (0.00 before opening)

Pressure gauge reading (After sample collected): Flow Controller: -8.40 in. Hg

Environmental Conditions (Outside):

Before Sampling

After Sampling

Temperature (°F): 57
Barometric Pressure (in. Hg): 30.22
Prevailing Wind Direction: E
General Weather Conditions: cloudy

61
29.98
S
mostly cloudy

Environmental Conditions (At Sample Location):

Before Sampling

After Sampling

Temperature (°F): 65
Barometric Pressure (in. Hg): 30.22

65
29.98

PID readings at sample location (ppmv): 0.0

Photographs taken before sampling? Yes **If Yes, what time:** **Taken by:**

Photographs taken after sampling? No **If Yes, what time:** **Taken by:**

Was the building aired out prior to sample collection? No **If yes, how long?**

Windows open? No **Ventilation fans?** No

Was there significant precipitation within 12 hours of (or during) the sampling event? Yes

Were any of the residents home during sampling? Yes **If yes, provide detail:** 2 adults

Did any of the occupants NOT follow instruction for residents? No **If yes, describe below:**

Air intake at ~4'10".

Basement Ceiling Height (to joists): Front _____ ; Back _____.

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process. Also, note the usage of the basement (storage only, laundry, etc.): Laundry in basement, half is finished (collected sample in finished area)



SUB-SLAB SAMPLING CHECKLIST

Sampling Location:
10 Morton St. Basement
(under stairs)

Sample ID: 045163-10MORT-SV6

Date: 3/18/25

Sampling personnel: J. Graff

Summa Canister ID: 484

Flow Regulator ID: 02040

Sample Type / Analysis Method: TO-15

Sampling Start Time: 1000

Sampling Finish Time: 1100

During Sampling	
Time	Vacuum
1000	-30.33
1015	-24.23
1030	-18.18
1045	-11.43
1100	-5.02

Did Summa Canister go to ambient pressure? No

Pressure gauge reading (Pre-opening): Flow Controller: 0.00 --> -30.33 in.Hg

Pressure gauge reading (After sample collected): Flow Controller: -5.02 --> 0.00 in.Hg

Environmental Conditions (Outside):

Before Sampling

After Sampling

Temperature:	41°F	44°F
Barometric Pressure:	30.06 in. Hg	30.04 in. Hg
Prevailing Wind Direction:	N	N
General Weather Conditions:	Sunny	Sunny

Photographs taken before sampling? Yes **If Yes, what time:** **Taken by:** JWG

Vacuum prior to sampling (in. WC): -0.015

Ambient air concentration (ppm): 0.1

Soil gas concentration prior to sampling (ppm): 0.1

Vapor point purged for ~5 min with a MiniRAE 3000 (500-600 cc/min) prior to sampling.

Comments:



SUB-SLAB SAMPLING CHECKLIST

Sampling Location:
10 Morton St. Basement (in closet)

Sample ID: 045163-10MORT-SV5

Date: 3/18/25

Sampling personnel: J. Graff

Summa Canister ID: 118

Flow Regulator ID: 02848

Sample Type / Analysis Method: TO-15

Sampling Start Time: 1005

Sampling Finish Time: 1105

During Sampling	
Time	Vacuum
1005	-30.18
1020	-24.31
1035	-17.65
1050	-11.20
1105	-4.27

Did Summa Canister go to ambient pressure? No

Pressure gauge reading (Pre-opening): Flow Controller: 0.00 --> -30.18 in.Hg

Pressure gauge reading (After sample collected): Flow Controller: -4.27 --> 0.00 in.Hg

Environmental Conditions (Outside):

Before Sampling

After Sampling

Temperature: 41°F
Barometric Pressure: 30.06 in. Hg
Prevailing Wind Direction: N
General Weather Conditions: Sunny

44°F
30.04 in. Hg
N
Sunny

Photographs taken before sampling? Yes If Yes, what time: Taken by: JWG

Vacuum prior to sampling (in. WC): -0.022

Ambient air concentration (ppm): 0.1

Soil gas concentration prior to sampling (ppm): 0.1 to 0.2

Vapor point purged for ~5 min with a MiniRAE 3000 (500-600 cc/min) prior to sampling.

Comments:



SUB-SLAB SAMPLING CHECKLIST

Sampling Location:
21 Morton SV1 (Near laundry
in basement)

Sample ID: 045163-21Mort-SV1

Date: 2/19/25

Sampling personnel: N. Troccoli, J. Graff

Summa Canister ID: 3180

Flow Regulator ID: 0261

Sample Type / Analysis Method: TO-15

Sampling Start Time: 1215

Sampling Finish Time: 1315

During Sampling	
Time	Vacuum
1215	-30.56
1230	-24.22
1245	-17.55
1300	-11.37
1315	-3.46

Did Summa Canister go to ambient pressure? No

Pressure gauge reading (Pre-opening): Flow Controller: 0.00 --> -30.56 in.Hg

Pressure gauge reading (After sample collected): Flow Controller: -3.46 --> 0.00 in.Hg

Environmental Conditions (Outside):

Before Sampling

After Sampling

Temperature: 24°F
Barometric Pressure: 30.16 in. Hg
Prevailing Wind Direction: WNW
General Weather Conditions: Sunny/Clear

25°F
30.15 in. Hg
WNW
Sunny/Clear

Photographs taken before sampling? Yes If Yes, what time: Taken by: JWG

Vacuum prior to sampling (in. WC): 0.000

Ambient air concentration (ppm): 0.1

Soil gas concentration prior to sampling (ppm): 0.3

Vapor point purged for ~5 min with a MiniRAE 3000 (500-600 cc/min) prior to sampling.

Comments:



SUB-SLAB SAMPLING CHECKLIST

Sampling Location:
**21 Morton Basement (Near the
basement door entrance)**

Sample ID: 045163-21Mort-SV2

Date: 2/19/25

Sampling personnel: N. Troccoli, J. Graff

Summa Canister ID: 374

Flow Regulator ID: 01085

Sample Type / Analysis Method: TO-15

Sampling Start Time: 1238

Sampling Finish Time: 1330

During Sampling	
Time	Vacuum
1238	-30.50
1258	-20.28
1313	-12.12
1326	-4.69
1330	-2.92

Did Summa Canister go to ambient pressure? No

Pressure gauge reading (Pre-opening): Flow Controller: 0.00 --> -30.50 in.Hg

Pressure gauge reading (After sample collected): Flow Controller: -2.92 --> 0.00 in.Hg

Environmental Conditions (Outside):

Before Sampling

After Sampling

Temperature: 24°F
Barometric Pressure: 30.16 in. Hg
Prevailing Wind Direction: WNW
General Weather Conditions: Sunny/Clear

24°F
30.16 in. Hg
WNW
Sunny/Clear

Photographs taken before sampling? Yes If Yes, what time: Taken by: JWG

Vacuum prior to sampling (in. WC): -0.004

Ambient air concentration (ppm): 0.0

Soil gas concentration prior to sampling (ppm): 0.0

Vapor point purged for ~5 min with a MiniRAE 3000 (500-600 cc/min) prior to sampling.

Comments:



SUB-SLAB SAMPLING CHECKLIST

Sampling Location:
156 Glen Basement (near brick chimney)

Sample ID: 045163-156Glen-SV1

Date: 2/19/25

Sampling personnel: N. Troccoli, J. Graff

Summa Canister ID: 3018

Flow Regulator ID: 01731

Sample Type / Analysis Method: TO-15

Sampling Start Time: 1323

Sampling Finish Time: 1423

During Sampling	
Time	Vacuum
1323	-30.45
1339	-24.58
1353	-19.42
1408	-13.58
1423	-7.50

Did Summa Canister go to ambient pressure? No

Pressure gauge reading (Pre-opening): Flow Controller: 0.00 --> -30.45 in.Hg

Pressure gauge reading (After sample collected): Flow Controller: -7.50 --> 0.00 in.Hg

Environmental Conditions (Outside):

Before Sampling

After Sampling

Temperature: 24°F
Barometric Pressure: 30.16 in. Hg
Prevailing Wind Direction: WNW
General Weather Conditions: Sunny/Clear

28°F
30.15 in. Hg
WNW
Sunny/Clear

Photographs taken before sampling? Yes If Yes, what time: Taken by: JWG

Vacuum prior to sampling (in. WC): 0.0009

Ambient air concentration (ppm): 0.0

Soil gas concentration prior to sampling (ppm): 1.4

Vapor point purged for ~10 min with a MiniRAE 3000 (500-600 cc/min) prior to sampling.

Comments:



SUB-SLAB SAMPLING CHECKLIST

Sampling Location:
31 Tufts SV1 (In
Utility/Sprinkler room)

Sample ID: 045163-31Tuft-SV1

Date: 2/19/25

Sampling personnel: N. Troccoli, J. Graff

Summa Canister ID: 470

Flow Regulator ID: 01442

Sample Type / Analysis Method: TO-15

Sampling Start Time: 1024

Sampling Finish Time: 1124

During Sampling	
Time	Vacuum
1024	-30.24
1039	-24.25
1054	-18.01
1109	-12.10
1124	-6.12

Did Summa Canister go to ambient pressure? No

Pressure gauge reading (Pre-opening): Flow Controller: 0.00 --> -30.24 in.Hg

Pressure gauge reading (After sample collected): Flow Controller: -6.12 --> 0.00 in.Hg

Environmental Conditions (Outside):

Before Sampling

After Sampling

Temperature: 19°F
Barometric Pressure: 30.19 in. Hg
Prevailing Wind Direction: WNW
General Weather Conditions: Sunny/Clear

22°F
30.17 in. Hg
WNW
Sunny/Clear

Photographs taken before sampling? Yes **If Yes, what time:** **Taken by:** JWG

Vacuum prior to sampling (in. WC): -0.009

Ambient air concentration (ppm): 0.0 to 0.1

Soil gas concentration prior to sampling (ppm): 0.4

Vapor point purged for ~5 min with a MiniRAE 3000 (500-600 cc/min) prior to sampling.

Comments:



SUB-SLAB SAMPLING CHECKLIST

Sampling Location:
**31 Tufts SV2 (the central SV
point under staircase)**

Sample ID: 045163-31Tuft-SV2

Date: 2/19/25

Sampling personnel: N. Troccoli, J. Graff

Summa Canister ID: 2736

Flow Regulator ID: 01715

Sample Type / Analysis Method: TO-15

Sampling Start Time: 1030

Sampling Finish Time: 1130

During Sampling	
Time	Vacuum
1030	-30.57
1045	-25.01
1100	-18.55
1115	-12.05
1130	-4.52

Did Summa Canister go to ambient pressure? No

Pressure gauge reading (Pre-opening): Flow Controller: 0.00 --> -30.57 in.Hg

Pressure gauge reading (After sample collected): Flow Controller: -4.52 --> 0.00 in.Hg

Environmental Conditions (Outside):

Before Sampling

After Sampling

Temperature: 19°F
Barometric Pressure: 30.19 in. Hg
Prevailing Wind Direction: WNW
General Weather Conditions: Sunny/Clear

22°F
30.17 in. Hg
WNW
Sunny/Clear

Photographs taken before sampling? Yes If Yes, what time: Taken by: JWG

Vacuum prior to sampling (in. WC): 0.000

Ambient air concentration (ppm): 0.1

Soil gas concentration prior to sampling (ppm): 0.3

Vapor point purged for ~5 min with a MiniRAE 3000 (500-600 cc/min) prior to sampling.

Comments:



SUB-SLAB SAMPLING CHECKLIST

Sampling Location:
97 Franklin basement (under
work bench)

Sample ID: 045163-97Frank-SS1

Date: 2/19/25

Sampling personnel: N. Troccoli, J. Graff

Summa Canister ID: 513

Flow Regulator ID: 0714

Sample Type / Analysis Method: TO-15

Sampling Start Time: 0848

Sampling Finish Time: 0938

During Sampling	
Time	Vacuum
0848	-30.48
0903	-22.64
0918	-14.55
0933	-6.29
0938	-2.90

Did Summa Canister go to ambient pressure? No

Pressure gauge reading (Pre-opening): Flow Controller: 0.00 --> -30.48 in.Hg

Pressure gauge reading (After sample collected): Flow Controller: -2.90 --> 0.00 in.Hg

Environmental Conditions (Outside):

Before Sampling

After Sampling

Temperature: 15°F
Barometric Pressure: 30.17 in. Hg
Prevailing Wind Direction: WNW
General Weather Conditions: Sunny/Clear

16°F
30.21 in. Hg
WNW
Sunny/Clear

Photographs taken before sampling? Yes If Yes, what time: Taken by: JWG

Vacuum prior to sampling (in. WC): 0.005

Ambient air concentration (ppm): 0.0

Soil gas concentration prior to sampling (ppm): 0.0 to 0.1

Vapor point purged for ~5 min with a MiniRAE 3000 (500-600 cc/min) prior to sampling.

Comments:



SUB-SLAB SAMPLING CHECKLIST

Sampling Location:
97 Franklin basement (under
work bench)

Sample ID: 045163-97Frank-SS1

Date: 2/19/25

Sampling personnel: N. Troccoli, J. Graff

Summa Canister ID: 4379

Flow Regulator ID: 0559

Sample Type / Analysis Method: TO-15

Sampling Start Time: 0845

Sampling Finish Time: 0936

During Sampling	
Time	Vacuum
0844	-30.58
0859	-22.93
0914	-14.81
0928	-7.02
0936	-2.96

Did Summa Canister go to ambient pressure? No

Pressure gauge reading (Pre-opening): Flow Controller: 0.00 --> -30.58 in.Hg

Pressure gauge reading (After sample collected): Flow Controller: -2.96 --> 0.00 in.Hg

Environmental Conditions (Outside):

Before Sampling

After Sampling

Temperature: 15°F
Barometric Pressure: 30.17 in. Hg
Prevailing Wind Direction: WNW
General Weather Conditions: Sunny/Clear

16°F
30.21 in. Hg
WNW
Sunny/Clear

Photographs taken before sampling? Yes If Yes, what time: Taken by: JWG

Vacuum prior to sampling (in. WC): 0.003

Ambient air concentration (ppm): 0.0 to 0.1

Soil gas concentration prior to sampling (ppm): 0.0 to 0.3

Vapor point purged for ~5 min with a MiniRAE 3000 (500-600 cc/min) prior to sampling.

Comments: SS2 point next to a laundry dryer that was in use during the duration of the SV sampling



SUB-SLAB SAMPLING CHECKLIST

Sampling Location:
103 Washington

Sample ID: 045163-103Wash-SV1

Date: 2/11/2025

Sampling personnel: D. Miller

Summa Canister ID: 4364

Flow Regulator ID: 01032

Sample Type / Analysis Method: SUMMA/TO-15

Sampling Start Time: 12:19

Sampling Finish Time: 13:07

During Sampling	
Time	Vacuum
12:19	-30.74
12:32	-22.73
12:54	-9.42
13:07	-1.37

Did Summa Canister go to ambient pressure? No

Pressure gauge reading (Pre-opening): Flow Controller: 0.00 --> -30.74 in.Hg

Pressure gauge reading (After sample collected): Flow Controller: -1.37 --> 0.00 in.Hg

Environmental Conditions (Outside):

Before Sampling

After Sampling

Temperature: 29°F
Barometric Pressure: 30.32 inHg
Prevailing Wind Direction: W
General Weather Conditions: Cloudy

30°F
30.31 inHg
W
Cloudy

Photographs taken before sampling? Yes **If Yes, what time:** **Taken by:**

Vacuum prior to sampling (in. WC): 0.000

Ambient air concentration (ppm): 0.0 - 0.1 ppmv

Soil gas concentration prior to sampling (ppm): 0.0 ppmv

Vapor point purged for ~5 min with a MiniRAE 3000 (500-600 cc/min) prior to sampling.

Comments:



SUB-SLAB SAMPLING CHECKLIST

Sampling Location:
103 Washington

Sample ID: 045163-103Wash-SV2

Date: 2/11/2025

Sampling personnel: D. Miller

Summa Canister ID: 2794

Flow Regulator ID: 01584

Sample Type / Analysis Method: SUMMA/TO-15

Sampling Start Time: 12:20

Sampling Finish Time: 13:05

During Sampling	
Time	Vacuum
12:20	-30.61
12:33	-22.5
12:55	-8.25
13:05	-1.50

Did Summa Canister go to ambient pressure? No

Pressure gauge reading (Pre-opening): Flow Controller: 0.00 --> -30.61 in.Hg

Pressure gauge reading (After sample collected): Flow Controller: -1.50 --> 0.00 in.Hg

Environmental Conditions (Outside):

Before Sampling

After Sampling

Temperature: 29°F
Barometric Pressure: 30.32 inHg
Prevailing Wind Direction: W
General Weather Conditions: Cloudy

30°F
30.31 inHg
W
Cloudy

Photographs taken before sampling? Yes **If Yes, what time:** **Taken by:**

Vacuum prior to sampling (in. WC): 0.000

Ambient air concentration (ppm): 0.0 - 0.1 ppmv

Soil gas concentration prior to sampling (ppm): 0.0 ppmv

Vapor point purged for ~5 min with a MiniRAE 3000 (500-600 cc/min) prior to sampling.

Comments:



SUB-SLAB SAMPLING CHECKLIST

Sampling Location:
105 Washington

Sample ID: 045163-105Wash-SV2

Date: 2/11/2025

Sampling personnel: D. Miller

Summa Canister ID: 1746

Flow Regulator ID: 0438

Sample Type / Analysis Method: SUMMA/TO-15

Sampling Start Time: 12:16

Sampling Finish Time: 12:50

During Sampling	
Time	Vacuum
12:16	-30.55
12:31	-19.21
12:46	-5.14
12:50	-2.01

Did Summa Canister go to ambient pressure? No

Pressure gauge reading (Pre-opening): Flow Controller: 0.00 --> -30.55 in.Hg

Pressure gauge reading (After sample collected): Flow Controller: -2.01 --> 0.00 in.Hg

Environmental Conditions (Outside):

Before Sampling

After Sampling

Temperature: 29°F
Barometric Pressure: 30.32 inHg
Prevailing Wind Direction: W
General Weather Conditions: Cloudy

30°F
30.31 inHg
W
Cloudy

Photographs taken before sampling? Yes **If Yes, what time:** **Taken by:**

Vacuum prior to sampling (in. WC): 0.000

Ambient air concentration (ppm): 0.0 ppmv

Soil gas concentration prior to sampling (ppm): 0.4 ppmv

Vapor point purged for ~5 min with a MiniRAE 3000 (500-600 cc/min) prior to sampling.

Comments:

Appendix H Field Monitoring Forms and Inspection Logs

50 Tufts Street Sub-Slab Depressurization System Monthly Monitoring Form

GENERAL MONITORING INFORMATION							
GEI Field Representative(s):		N. Troccoli			Monitoring Start Time:		12:45 PM
					Monitoring End Time:		1:30 PM
Date:		01/08/25					
Weather:		20's, Sunny					
INSTRUMENTATION INFORMATION							
	Instrument	Manufacturer	Model	Calibrated To:	Successful Calibration?		
	PID (ppm)	RAE Systems	MiniRAE 3000	100 ppm Isobutylene	Y / N 100.0 ppm		
	Manometer (in. H ₂ O)	Dwyer	Mark III-475-0 Series	N/A	Zeroed before each reading		
	Anemometer (CFM)	Reed	R4500SD	N/A	N/A		
FIELD MEASUREMENTS & OBSERVATIONS							
System Status/Configuration		Pressure/VOC Measurements			System Flow Rate Data		
		Monitoring Point	Pressure (in. H₂O)	VOC (ppm)	Velocity (ft/min)	System Flowrate (CFM):	
Fenced Enclosure Secure?	Yes	West Header	-1.76	1.3	3019	264	
Blower On?	Yes	Center Header	-1.89	3.2			
Condensate Accumulated?	No	East Header	-1.82	0.8	Tank Exterior Monitoring		
Condensate Drained?	NA	North Header	-1.61	0.2			
Hour Meter Reading?	NM	South Header	-1.86	3.8			
Lead Carbon Unit?	A	Combined System Influent	-5.86	1.1			
Secondary Carbon Unit?	B	Blower Effluent	21.50	1.4	Bubbling Paint Visible?		
Polish Carbon Unit?	N/A	Lead Carbon Effluent	18.05	0.0	Tank	Y/N	
VFD Setting (Hz)	60	Secondary Carbon Effluent	1.52	0.0	A	Yes	
		System Effluent	Effluent is secondary tank - Tank C offline		B	Yes	
		Ambient Air		0.0	C	Yes	
		Blower Filter Inlet	-16				
		Blower Filter Outlet	NM				
ABBREVIATIONS		COMMENTS					
ppm = parts per million CFM = cubic feet per minute ft/min = feet per minute PID = photoionization detector N/A = Not Applicable VOC = volatile organic compound in. H2O = inches of water column NM = Not Measured VFD = Variable Frequency Drive							

**50 Tufts Street Sub-Slab Depressurization System
Monthly Monitoring Form**

GENERAL MONITORING INFORMATION						
GEI Field Representative(s): _____ _____ _____		D. Miller		Monitoring Start Time: _____ Monitoring End Time: _____		
Date: _____		02/11/25				
Weather: _____		30's, Cloudy				
INSTRUMENTATION INFORMATION						
	Instrument	Manufacturer	Model	Calibrated To:	Successful Calibration?	
	PID (ppm)	RAE Systems	MiniRAE 3000	100 ppm Isobutylene	Y / N 100.0 ppm	
	Manometer (in. H ₂ O)	Dwyer	Mark III-475-0 Series	N/A	Zeroed before each reading	
	Anemometer (CFM)	Reed	R4500SD	N/A	N/A	
FIELD MEASUREMENTS & OBSERVATIONS						
System Status/Configuration		Pressure/VOC Measurements			System Flow Rate Data	
		Monitoring Point	Pressure (in. H₂O)	VOC (ppm)	Velocity (ft/min)	System Flowrate (CFM):
Fenced Enclosure Secure?	Yes	West Header	NM	NM	NM	NM
Blower On?	Yes	Center Header	NM	NM		
Condensate Accumulated?	No	East Header	NM	NM	Tank Exterior Monitoring	
Condensate Drained?	NA	North Header	NM	NM	Bubbling Paint Visible?	
Hour Meter Reading?	NM	South Header	NM	NM	Tank	Y/N
Lead Carbon Unit?	A	Combined System Influent	NM	1.0	A	Yes
Secondary Carbon Unit?	B	Blower Effluent	NM	1.3	B	Yes
Polish Carbon Unit?	N/A	Lead Carbon Effluent	NM	0.0	C	Yes
VFD Setting (Hz)	60	Secondary Carbon Effluent	NM	0.0	Rust Visible?	
		System Effluent	Effluent is secondary tank - Tank C offline		Tank	Y/N
		Ambient Air		0.0	A	Yes
		Blower Filter Inlet	NM		B	Yes
		Blower Filter Outlet	NM		C	Yes
ABBREVIATIONS		COMMENTS				
ppm = parts per million CFM = cubic feet per minute ft/min = feet per minute PID = photoionization detector N/A = Not Applicable VOC = volatile organic compound in. H ₂ O = inches of water column NM = Not Measured VFD = Variable Frequency Drive						

**50 Tufts Street Sub-Slab Depressurization System
Monthly Monitoring Form**

GENERAL MONITORING INFORMATION							
GEI Field Representative(s):	N. Troccoli			Monitoring Start Time:	11:15 AM		
				Monitoring End Time:	12:00 PM		
Date:	03/06/25						
Weather:	50's, Cloudy						
INSTRUMENTATION INFORMATION							
	Instrument	Manufacturer	Model	Calibrated To:	Successful Calibration?		
	PID (ppm)	RAE Systems	MiniRAE 3000	100 ppm Isobutylene	Y / N 98.9 ppm		
	Manometer (in. H ₂ O)	Dwyer	Mark III-475-0 Series	N/A	Zeroed before each reading		
	Anemometer (CFM)	Reed	R4500SD	N/A	N/A		
FIELD MEASUREMENTS & OBSERVATIONS							
System Status/Configuration		Pressure/VOC Measurements			System Flow Rate Data		
		Monitoring Point	Pressure (in. H₂O)	VOC (ppm)	Velocity (ft/min)	System Flowrate (CFM):	
Fenced Enclosure Secure?	Yes	West Header	NM	NM	NM	NM	
Blower On?	Yes	Center Header	NM	NM			
Condensate Accumulated?	No	East Header	NM	NM	Tank Exterior Monitoring Bubbling Paint Visible?		
Condensate Drained?	NA	North Header	NM	NM			
Hour Meter Reading?	NM	South Header	NM	NM			
Lead Carbon Unit?	A	Combined System Influent	NM	1.2			
Secondary Carbon Unit?	B	Blower Effluent	NM	1.7	Rust Visible?		
Polish Carbon Unit?	N/A	Lead Carbon Effluent	NM	0.0			
VFD Setting (Hz)	60	Secondary Carbon Effluent	NM	0.0			
		System Effluent	Effluent is secondary tank - Tank C offline				
		Ambient Air		0.0	Tank Y/N		
		Blower Filter Inlet	NM				
		Blower Filter Outlet	NM				
						Tank Y/N	
ABBREVIATIONS		COMMENTS					
ppm = parts per million CFM = cubic feet per minute ft/min = feet per minute PID = photoionization detector N/A = Not Applicable VOC = volatile organic compound in. H ₂ O = inches of water column NM = Not Measured VFD = Variable Frequency Drive							

50 Tufts Street Sub-Slab Depressurization System Monthly Monitoring Form

GENERAL MONITORING INFORMATION									
GEI Field Representative(s):		N. Troccolo			Monitoring Start Time:		10:45 AM		
		J. Graff			Monitoring End Time:		11:15 AM		
Date:		04/24/25							
Weather:		60's, Sunny							
INSTRUMENTATION INFORMATION									
		Instrument	Manufacturer	Model	Calibrated To:	Successful Calibration?			
		PID (ppm)	RAE Systems	MiniRAE 3000	100 ppm Isobutylene	Y / N 100.0 ppm			
		Manometer (in. H ₂ O)	Dwyer	Mark III-475-0 Series	N/A	Zeroed before each reading			
		Anemometer (CFM)	Reed	R4500SD	N/A	N/A			
FIELD MEASUREMENTS & OBSERVATIONS									
System Status/Configuration		Pressure/VOC Measurements			System Flow Rate Data				
		Monitoring Point	Pressure (in. H ₂ O)	VOC (ppm)	Velocity (ft/min)	System Flowrate (CFM):			
Fenced Enclosure Secure?	Yes	West Header	-2.44	1.3	5035	439			
Blower On?	Yes	Center Header	-2.50	2.9					
Condensate Accumulated?	No	East Header	-2.53	0.9	Tank Exterior Monitoring				
Condensate Drained?	NA	North Header	-2.49	0.6					
Hour Meter Reading?	NM	South Header	-2.62	5.6					
Lead Carbon Unit?	A	Combined System Influent	-6.55	1.5					
Secondary Carbon Unit?	B	Blower Effluent	33.10	1.8	Bubbling Paint Visible?				
Polish Carbon Unit?	N/A	Lead Carbon Effluent	22.50	0.0	Tank	Y/N			
VFD Setting (Hz)	60	Secondary Carbon Effluent	1.50	0.0	A	Yes			
		System Effluent	Effluent is secondary tank - Tank C offline			B	Yes		
		Ambient Air		0.0	C	Yes			
		Blower Filter Inlet	-16		Rust Visible?				
		Blower Filter Outlet	NM		Tank	Y/N			
					A	Yes			
					B	Yes			
					C	Yes			
ABBREVIATIONS		COMMENTS							
ppm = parts per million CFM = cubic feet per minute ft/min = feet per minute PID = photoionization detector N/A = Not Applicable VOC = volatile organic compound in. H2O = inches of water column NM = Not Measured VFD = Variable Frequency Drive									

50 Tufts Street Sub-Slab Depressurization System Monthly Monitoring Form

GENERAL MONITORING INFORMATION									
GEI Field Representative(s):		N. Troccoli			Monitoring Start Time:		11:15 AM		
					Monitoring End Time:		11:30 AM		
Date:		05/13/25							
Weather:		70's, Sunny							
INSTRUMENTATION INFORMATION									
		Instrument	Manufacturer	Model	Calibrated To:	Successful Calibration?			
		PID (ppm)	RAE Systems	MiniRAE 3000	100 ppm Isobutylene	Y / N 101.2 ppm			
		Manometer (in. H ₂ O)	Dwyer	Mark III-475-0 Series	N/A	Zeroed before each reading			
		Anemometer (CFM)	Reed	R4500SD	N/A	N/A			
FIELD MEASUREMENTS & OBSERVATIONS									
System Status/Configuration		Pressure/VOC Measurements				System Flow Rate Data			
		Monitoring Point	Pressure (in. H ₂ O)	VOC (ppm)		Velocity (ft/min)	System Flowrate (CFM):		
Fenced Enclosure Secure?	Yes	West Header	NM	NM		NM	NM		
Blower On?	Yes	Center Header	NM	NM					
Condensate Accumulated?	No	East Header	NM	NM		Tank Exterior Monitoring			
Condensate Drained?	NA	North Header	NM	NM					
Hour Meter Reading?	NM	South Header	NM	NM					
Lead Carbon Unit?	A	Combined System Influent	NM	1.1					
Secondary Carbon Unit?	B	Blower Effluent	NM	1.3		Bubbling Paint Visible?			
Polish Carbon Unit?	N/A	Lead Carbon Effluent	NM	0.0		Tank	Y/N		
VFD Setting (Hz)	60	Secondary Carbon Effluent	NM	0.0		A	Yes		
		System Effluent	Effluent is secondary tank - Tank C offline			B	Yes		
		Ambient Air		0.0		C	Yes		
		Blower Filter Inlet	NM			Rust Visible?			
		Blower Filter Outlet	NM						
ABBREVIATIONS		COMMENTS							
ppm = parts per million CFM = cubic feet per minute ft/min = feet per minute PID = photoionization detector N/A = Not Applicable VOC = volatile organic compound in. H2O = inches of water column NM = Not Measured VFD = Variable Frequency Drive									

**50 Tufts Street Sub-Slab Depressurization System
Monthly Monitoring Form**

GENERAL MONITORING INFORMATION						
GEI Field Representative(s):	N. Troccoli			Monitoring Start Time:	12:00 PM	
				Monitoring End Time:	12:15 PM	
Date:	06/13/25					
Weather:	70's, Sunny					
INSTRUMENTATION INFORMATION						
	Instrument	Manufacturer	Model	Calibrated To:	Successful Calibration?	
	PID (ppm)	RAE Systems	MiniRAE 3000	100 ppm Isobutylene	Y / N 100.5 ppm	
	Manometer (in. H ₂ O)	Dwyer	Mark III-475-0 Series	N/A	Zeroed before each reading	
	Anemometer (CFM)	Reed	R4500SD	N/A	N/A	
FIELD MEASUREMENTS & OBSERVATIONS						
System Status/Configuration		Pressure/VOC Measurements			System Flow Rate Data	
		Monitoring Point	Pressure (in. H₂O)	VOC (ppm)	Velocity (ft/min)	System Flowrate (CFM):
Fenced Enclosure Secure?	Yes	West Header	NM	NM	NM	NM
Blower On?	Yes	Center Header	NM	NM		
Condensate Accumulated?	No	East Header	NM	NM	Tank Exterior Monitoring Bubbling Paint Visible?	
Condensate Drained?	NA	North Header	NM	NM		
Hour Meter Reading?	NM	South Header	NM	NM		
Lead Carbon Unit?	A	Combined System Influent	NM	2.0		
Secondary Carbon Unit?	B	Blower Effluent	NM	2.1		
Polish Carbon Unit?	N/A	Lead Carbon Effluent	NM	0.0	Rust Visible?	
VFD Setting (Hz)	60	Secondary Carbon Effluent	NM	0.0		
		System Effluent	Effluent is secondary tank - Tank C offline			
		Ambient Air		0.0		
		Blower Filter Inlet	NM			
		Blower Filter Outlet	NM			
ABBREVIATIONS		COMMENTS				
ppm = parts per million CFM = cubic feet per minute ft/min = feet per minute PID = photoionization detector N/A = Not Applicable VOC = volatile organic compound in. H ₂ O = inches of water column NM = Not Measured VFD = Variable Frequency Drive						

**60 Tufts Street
SSDS Field Monitoring Form**

GENERAL MONITORING INFORMATION

GEI Field Representative(s):	N. Troccoli	Monitoring Start Time:	1:30 PM
		Monitoring End Time:	2:15 PM
Date:	01/08/25		
Weather:	20's °F, Sunny		

INSTRUMENTATION INFORMATION

Instrument	Manufacturer	Model	Serial No.	Calibrated To:	Successful Calibration?
PID (ppm)	RAE Systems	miniRAE 3000	592-909711	100.0 ppm Isobutylene	Y / N Cal. Reading (ppm): 100.0
Manometer (in. H ₂ O)	Dwyer	Mark III-475-0 Series	N/A	N/A	Zeroed before each reading? Y / N
Anemometer (CFM)	Reed	R4500SD	N/A	N/A	N/A

FIELD MEASUREMENTS / OBSERVATIONS

System Status/Configuration		Pressure/VOC Measurements			System Flow Rate Data	
		Monitoring Point	Pressure (in. H ₂ O)	VOC (ppm)	Velocity (feet per minute)	System Flowrate (CFM): = (PI * r ²) * ft per min
Blower Enclosure Secure?	Y / N	North Header	NM*	NM*	996	85
Blower On?	Y / N	South Header	NM*	NM*		
Influent Condensate Accumulated?	Y / N	Combined System Influent	-1.40	0.0		
Effluent Condensate Accumulated?	Y / N	System Effluent	N/A	0.0		
Condensate Drained?	Y / N	Blower Filter Inlet	10			
Hour Meter Reading	N/A	Blower Filter Outlet	32			
VFD Setting (Hz)	60	Ambient Air Outside Blower Enclosure		0.0		

NOTES:

1. ppm = parts per million.
2. CFM = cubic feet per minute.
3. PID = photoionization detector.
4. N/A = Not Applicable.
5. VOC = volatile organic compound.
6. in. H₂O = inches of water column.
7. VFD = variable frequency drive.
8. Hz = Hertz.

COMMENTS:

* Note: Headers not measured because we did not have access to the building.

**60 Tufts Street
SSDS Field Monitoring Form**

GENERAL MONITORING INFORMATION

GEI Field Representative(s):	<u>N. Troccoli</u>	Monitoring Start Time:	<u>11:15 AM</u>
	<u>J. Graff</u>	Monitoring End Time:	<u>11:35 AM</u>
Date:	<u>04/24/25</u>		
Weather:	<u>60's °F, Sunny</u>		

INSTRUMENTATION INFORMATION

Instrument	Manufacturer	Model	Serial No.	Calibrated To:	Successful Calibration?
PID (ppm)	RAE Systems	miniRAE 3000	592-909711	100.0 ppm Isobutylene	Y / N Cal. Reading (ppm): 100.0
Manometer (in. H ₂ O)	Dwyer	Mark III-475-0 Series	N/A	N/A	Zeroed before each reading? Y / N
Anemometer (CFM)	Reed	R4500SD	N/A	N/A	N/A

FIELD MEASUREMENTS / OBSERVATIONS

System Status/Configuration		Pressure/VOC Measurements			System Flow Rate Data	
		Monitoring Point	Pressure (in. H ₂ O)	VOC (ppm)	Velocity (feet per minute)	System Flowrate (CFM): = (PI * r ²) * ft per min
Blower Enclosure Secure?	Y / N	North Header	NM*	NM*	1996	171
Blower On?	Y / N	South Header	NM*	NM*		
Influent Condensate Accumulated?	Y / N	Combined System Influent	-1.39	0.0		
Effluent Condensate Accumulated?	Y / N	System Effluent	N/A	0.0		
Condensate Drained?	Y / N	Blower Filter Inlet	11			
Hour Meter Reading	N/A	Blower Filter Outlet	35			
VFD Setting (Hz)	60	Ambient Air Outside Blower Enclosure		0.0		

NOTES:

1. ppm = parts per million.
2. CFM = cubic feet per minute.
3. PID = photoionization detector.
4. N/A = Not Applicable.
5. VOC = volatile organic compound.
6. in. H₂O = inches of water column.
7. VFD = variable frequency drive.
8. Hz = Hertz.

COMMENTS:

* Note: Headers not measured because we did not have access to the building.

**Capuano Center Sub-Slab Depressurization System
Monthly Mechanical Inspection Log**

GENERAL INFORMATION					
GEI Field Representatives: <u>N. Troccoli</u>		Outdoor Monitoring		Indoor Monitoring	
Date: <u>01/08/25</u>		Start-time of monitoring work: <u>2:20 PM</u>		NA	
Weather: <u>20's °F, Sunny</u>		End-time of monitoring work: <u>3:20 PM</u>		NA	
INSTRUMENTATION INFORMATION					
Instrument	Manufacturer	Model	GEI Identification No.	Calibrant	Successful Calibration
PID (ppm)	RAE Systems	miniRAE3000	SN 592-909711	100 ppm Isobutylene	Yes
Manometer (in. H ₂ O)	Dwyer	Mark III-475-0000-FM	N/A	N/A	Zeroed before each reading
Hot Wire Thermo-Anemometer (ft/min)	Reed	R4500SD	N/A	N/A	Zeroed before each reading
OBSERVATIONS AND MEASUREMENTS					
ENCLOSURE MEASUREMENTS					
Shed Secure? <u>NA</u>		Influent Flow Rate			
Condensate Accumulated? <u>Yes</u>		Port ID		Flow (cfm)	
Condensate Drained? <u>No</u>		Manifold 12		64	
		Manifold 13		60	
		Manifold 14		65	
System Monitoring Points					
Port ID	Typical Vacuum Range (in. H ₂ O)	Vacuum (in. H ₂ O)	Typical Range of VOCs (ppb)	VOC Concentration (ppm)	
Manifold 12	-0.300 to -0.500	-0.913	0 to 2000	0.0	
Manifold 13	-0.300 to -0.500	-1.568	0 to 2000	0.0	
Manifold 14	-0.300 to -0.500	-0.762	0 to 2000	0.0	
EXTERIOR EXTRACTION MONITORING POINT MEASUREMENTS					
Monitoring Point Identification	Status (on/off)	Vacuum (in. H ₂ O)	VOC Concentration (ppm)		
122-1	on	-0.648	0.0		
122-2	on	-0.683	0.0		
122-3	on	-0.722	0.0		
126-1	on	-0.694	0.0		
126-2	on	-0.534	0.0		
126-3	on	-0.591	0.0		
134-1	on	-1.381	0.0		
134-2	on	-1.476	0.0		
134-3	on	-1.396	0.0		
138-1	on	-1.493	0.0		
138-2	on	-1.463	0.0		
138-3	on	-1.439	0.0		
142-1	on	-0.451	0.0		
142-2	on	-0.481	0.0		
142-3	on	-0.471	0.0		
146-1	on	-0.464	0.0		
146-2	on	-0.451	0.0		
146-3	on	-0.440	0.0		

**Capuano Center Sub-Slab Depressurization System
Monthly Mechanical Inspection Log**

INTERIOR MEASUREMENTS																							
Ambient Air Measurements		Sub-Slab Monitoring Points																					
Classroom	VOC Concentration (ppm)	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #f2f2f2;"> <th style="width: 33%; text-align: center; padding: 5px;">Monitoring Point Identification</th> <th style="width: 33%; text-align: center; padding: 5px;">Vacuum (in. H₂O)</th> <th style="width: 33%; text-align: center; padding: 5px;">VOC Concentration (ppm)</th> </tr> </thead> <tbody> <tr><td style="text-align: center; padding: 5px;">Room 122A</td><td style="text-align: center; padding: 5px;">NM</td><td style="text-align: center; padding: 5px;">NM</td></tr> <tr><td style="text-align: center; padding: 5px;">Room 126A</td><td style="text-align: center; padding: 5px;">NM</td><td style="text-align: center; padding: 5px;">NM</td></tr> <tr><td style="text-align: center; padding: 5px;">Room 133A</td><td style="text-align: center; padding: 5px;">NM</td><td style="text-align: center; padding: 5px;">NM</td></tr> <tr><td style="text-align: center; padding: 5px;">Room 137A</td><td style="text-align: center; padding: 5px;">NM</td><td style="text-align: center; padding: 5px;">NM</td></tr> <tr><td style="text-align: center; padding: 5px;">Room 142A</td><td style="text-align: center; padding: 5px;">NM</td><td style="text-align: center; padding: 5px;">NM</td></tr> <tr><td style="text-align: center; padding: 5px;">Room 146A</td><td style="text-align: center; padding: 5px;">NM</td><td style="text-align: center; padding: 5px;">NM</td></tr> </tbody> </table>	Monitoring Point Identification	Vacuum (in. H ₂ O)	VOC Concentration (ppm)	Room 122A	NM	NM	Room 126A	NM	NM	Room 133A	NM	NM	Room 137A	NM	NM	Room 142A	NM	NM	Room 146A	NM	NM
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122	NM																						
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146	NM																						
COMMENTS																							
Notes: 1. Manifold 12 is the manifold pipe for rooms 122 and 126. Manifold 13 is the manifold pipe for rooms 134 and 138. Manifold 14 is the manifold pipe for rooms 142 and 146. 2. PID = photoionization detector. 3. ppb = parts per billion. 4. ppm = parts per million. 5. in. H₂O = inches of water column. 6. ft = feet. 7. cfm = cubic feet per minute. 8. NA = Not Applicable. 9. NM = Not Measured. 10. Anemometer not functioning. Influent flow was not measured.																							

**Capuano Center Sub-Slab Depressurization System
Monthly Mechanical Inspection Log**

GENERAL INFORMATION					
GEI Field Representatives: <u>N. Troccoli</u>		Outdoor Monitoring		Indoor Monitoring	
Date: <u>04/24/25</u>		Start-time of monitoring work: <u>11:45 AM</u>		NA	
Weather: <u>60's °F, Sunny</u>		End-time of monitoring work: <u>12:40 PM</u>		NA	
INSTRUMENTATION INFORMATION					
Instrument	Manufacturer	Model	GEI Identification No.	Calibrant	Successful Calibration
PID (ppm)	RAE Systems	miniRAE3000	SN 592-909711	100 ppm Isobutylene	Yes
Manometer (in. H ₂ O)	Dwyer	Mark III-475-0000-FM	N/A	N/A	Zeroed before each reading
Hot Wire Thermo-Anemometer (ft/min)	Reed	R4500SD	N/A	N/A	Zeroed before each reading
OBSERVATIONS AND MEASUREMENTS					
ENCLOSURE MEASUREMENTS					
Shed Secure? <u>NA</u>		Influent Flow Rate			
Condensate Accumulated? <u>Yes</u>		Port ID		Flow (cfm)	
Condensate Drained? <u>No</u>		Manifold 12		113	
		Manifold 13		77	
		Manifold 14		110	
System Monitoring Points					
Port ID	Typical Vacuum Range (in. H ₂ O)	Vacuum (in. H ₂ O)	Typical Range of VOCs (ppb)	VOC Concentration (ppm)	
Manifold 12	-0.300 to -0.500	-0.870	0 to 2000	0.0	
Manifold 13	-0.300 to -0.500	-1.460	0 to 2000	0.0	
Manifold 14	-0.300 to -0.500	-0.781	0 to 2000	0.0	
EXTERIOR EXTRACTION MONITORING POINT MEASUREMENTS					
Monitoring Point Identification	Status (on/off)	Vacuum (in. H ₂ O)	VOC Concentration (ppm)		
122-1	on	-0.653	0.0		
122-2	on	-0.693	0.0		
122-3	on	-0.667	0.0		
126-1	on	-0.670	0.0		
126-2	on	-0.515	0.0		
126-3	on	-0.560	0.0		
134-1	on	-1.230	0.0		
134-2	on	-1.335	0.1		
134-3	on	-1.226	0.0		
138-1	on	-1.343	0.0		
138-2	on	-1.335	0.0		
138-3	on	-1.330	0.0		
142-1	on	-0.516	0.0		
142-2	on	-0.546	0.0		
142-3	on	-0.528	0.0		
146-1	on	-0.521	0.0		
146-2	on	-0.508	0.0		
146-3	on	-0.472	0.0		

**Capuano Center Sub-Slab Depressurization System
Monthly Mechanical Inspection Log**

INTERIOR MEASUREMENTS																																									
Ambient Air Measurements		Sub-Slab Monitoring Points																																							
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Appendix I EPMM Inspection Forms

EPMM Option 1
Field Monitoring / Inspection Form

GENERAL MONITORING INFORMATION					
GEI Field Representative(s):		J. Graff		Address: 27 Tufts St	
		M. Forrest		Monitoring Start Time: 9:10 AM	
Date:		2/20/2025		Monitoring End Time: 9:20 AM	
Weather:		Cloudy, 18°F			

INSTRUMENTATION INFORMATION					
Instrument	Manufacturer	Model	Serial No.	Calibrated To:	Successful Calibration?
PID (ppm)	RAE Systems	ppmRAE3000	592-909687	100 ppm Isobutylene Time: 0830	☒ Y / N Cal. Reading (ppm):100.6
Manometer (in. H ₂ O)	Dwyer	Mark 111-475-0 Series	475-000-FM	N/A	Zeroed before each reading? Y / N

FIELD MEASUREMENTS / OBSERVATIONS					
System Status/Configuration		Pressure/VOC Measurements			
		Monitoring Point	Pressure (in. H ₂ O)	VOC (ppm)	Location Description (e.g., distance from foundation walls)
Radon Fan On?	☒ Y / N	System Influent Pipe	NM	NM	NM
Exterior Fan Condition (housing, wires, etc)?	☒ good / fair / poor	Ambient Air	N/A	0.0	
Excessive fan noise?	Y / ☒ N				
Interior Extraction Pipe Condition (cracks, damage, etc)?	☒ good / fair / poor	Ambient Air	N/A	0.0	
Exterior Pipe Condition (cracks, damage, etc.)?	☒ good / fair / poor				
Leaks Around Slab Penetrations?	Y / ☒ N				
Slab or Wall Cracks / Openings That Impair System Performance?	Y / ☒ N				

NOTES:	
1. EPMM = Exposure Pathway Mitigation Measure. 2. ppm = parts per million. 3. PID = photoionization detector. 4. N/A = Not Applicable. 5. VOC = volatile organic compound. 6. in. H₂O = inches of water column. 7. NM = Not Measured.	

COMMENTS:	
1. Observed minor epoxy peeling area on floor near basement door entrance, ~18 square inches	
2. Observed minor epoxy cracking on floor to left of stairs.	
3. Observed mnor epoxy peeling and chipping along slab crack to the left of the stairs, ~10 square inches	
4. Could not reach node battery to check status.	

Appendix J Atlas Documentation



10 State Street, Suite 100
Woburn, MA 01801
781.932.9400 | oneatlas.com

May 9, 2025

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup
15 Presidential Way
Woburn, Massachusetts

via: eDEP

SUBJECT: Contained-In Determination
Soil from Tufts Street Right-of-Way Improvements
Somerville, MA
RTN 3-51811
Atlas Project No.: 6000007464

Dear Program Manager:

Atlas Technical Consultants LLC (Atlas) has been retained by the City of Somerville to provide Massachusetts Contingency Plan (310 CMR 40.0000)(MCP) and related Licensed Site Professional (LSP) services to support the Tufts Street Improvement Project. On behalf of the City of Somerville, I have made a "contained-in" determination (CID) following the approach presented in the Massachusetts Department of Environmental Protection's (MassDEP) Technical Update, Considerations for Managing Contaminated Soil: RCRA Land Disposal Restrictions and Contained-In Determination (2010) regarding soil from a portion of the following M.G.L. c. 21E disposal site:

Release Tracking Number:	3-51811
Site Name:	Tufts Street Right-of-Way Improvements
Street Address:	Tufts Street right-of-way from Cross Street to Washington Street
City/Town:	Somerville, MA
Zip Code:	02145

The soil contained the listed hazardous waste(s) with Waste Codes U043, U210 and U228, which MassDEP is authorized to regulate under the Resource Conservation and Recovery Act (RCRA) by the U.S. Environmental Protection Agency (USEPA). However, the soil (check one):

- ☒ Met all applicable S-1 standards upon removal*; or
- ☐ Was treated through a method of treatment other than dilution so as to meet all applicable S-1 standards.

*The soil noted herein has been pre-characterized in-situ and has been determined to meet applicable S-1 standards.



The levels of the listed hazardous waste constituents in the soils to be generated are:

Summary of Detected Listed Waste within Contained-In Determination						
Sample Name / Depth	Sample Date	Substance/CAS # / Waste Code	Results (ppm)	MCP Method 1S-1 Standards		
				S-1 Soil & GW-1	S-1 Soil & GW-2	S-1 Soil & GW-3
ATC-8, 5-10'	3/14/24	Tetrachloroethylene (PCE) / 127-18-4 / U210	0.134	1 ppm	4 ppm	100 ppm
50Tuft-B101, 0-1'	2/12/24		0.0023			
50Tuft-B101,3 - 5'	2/12/24		0.015			
50Tuft-B102, 0-1'	2/12/24		0.00048			
50Tuft-B102, 1-3'	2/12/24		0.001			
50Tuft-B104, 0-1'	2/12/24		0.023			
50Tuft-B104, 1-3'	2/12/24		0.015			
50Tuft-B105, 0-1'	2/12/24		0.81			
50Tuft-B105, 1-3'	2/12/24		0.01			
50Tuft-B102, 1-3'	2/12/24	Trichloroethene (TCE) / 79-01-06 / U228	0.00037	0.3	0.3	30
50Tuft-B105, 0-1'	2/12/24	Vinyl Chloride / 75-01-04 / U043	0.053	0.3	0.3	0.3

The City of Somerville Tufts Street Improvement Project is to implement traffic calming and accessibility improvements that will reconstruct sidewalks, install new raised stormwater inlets drains to improve the existing stormwater management system, and repave Tufts Street between Cross Street and Washington Street as part of the City's Pavement and Sidewalk Management Program. Most excavations will be limited to 3 feet below grade with some excavations for drainage structure connections / rehabilitations extending to 5 feet below grade. Groundwater has been observed to range from approximately 7 to 13 feet below grade in the majority of the area where excavation will occur. To the extent practicable, soil will be reused in the area from which it was excavated. The limit of work is shown on attached **Figures 1 and 2**.

Most work is located within a Disposal Site listed by the MassDEP under Release Tracking Number (RTN) 3-23246. **Figure 1** shows the northern extent of the Disposal Site as it relates to limits of work and all the proposed work shown on **Figure 2** is within the Disposal Site. This Disposal Site is associated with a release of tetrachloroethylene, also known as perchloroethylene (PCE), to soil and groundwater from a former drycleaner facility located at the abutting 50 Tufts Street property. Based upon a review of reports submitted to MassDEP for RTN 3-23246 Atlas concludes that the vertical extent of this Disposal Site begins just below the pavement surface and extends to at least 10 feet below grade.

On March 14 and 15, 2024, Atlas supervised the installation of 8 soil borings identified as ATC-1 to ATC-8 for sampling and laboratory analyses of soil to conduct in-situ pre-characterization of soil within the Tufts Street right-of-way. Locations were selected to reflect areas where soil excavation was proposed to support planned work. Soil borings ATC-4 to ATC-8 are located within the Disposal Site. Soil boring ATC-3 is located at the approximate northeast edge of the Disposal Site and borings ATC-1 and ATC-2 are located outside the Disposal Site. Two soil samples from each boring, for a total of sixteen (16) soil samples, were collected. At each boring location, a discrete soil sample was collected by hand auger during preclearing from 0 to 5 feet below grade and using a dedicated acetate liners using a Geoprobe drill rig from 5 to 10 feet below grade surface. Soil boring locations are shown on **Figures 1 and 2**.



Soil samples from each boring were screened for total volatile organic compounds (VOCs), i.e., headspace, with a pre-calibrated photoionization detector (PID) in accordance with the MassDEP jar headspace method.

The soil samples were placed in laboratory provided containers and submitted to Eurofins laboratory under a chain of custody and analyzed for low level volatile organic compounds (VOCs) by EPA Method 8260.

Two sets of composite soil samples were collected from the 8 soil borings. One set (ATC-1 to ATC-8 Composite 0-5') was from the 0 to 5 feet below grade interval and the other set (ATC-1 to ATC-8 Composite 5-10') was from 5 to 10 foot below surface interval. These samples were placed in properly preserved laboratory provided containers and submitted to Eurofins laboratory under a chain-of-custody for the following analyses typically required by soil management facilities:

- Semi-VOCs with low level PAHs (SIMS) by EPA Method 8270;
- PCBs by EPA Method 8082;
- RCRA 8 Metals; TCLP lead;
- Total Petroleum Hydrocarbons by 8100; and
- Corrosivity; Total Organic Carbon; Flashpoint; Reactivity Cyanide and Sulfide; and Conductivity.

The soil analytical results were non-detect for all VOCs at 15 of 16 samples. Only PCE at 0.0314 milligrams per kilogram (mg/kg) was detected in soil boring ATC-8 at 5-10 feet below grade surface. The soil analyses do not exhibit any hazardous waste characteristics pursuant to 310 CMR 30.120. All detected compounds reported were below their MCP Method 1 Standards as were the detection limits for those compounds not detected. A summary of VOC soil data is presented in attached **Table 1**. The associated laboratory report is attached.

Atlas reviewed previous submittals and associated soil data made to the MassDEP for the following RTNs associated with 50 Tufts Street or in the immediate area for data relevant to this CID:

- RTNs 3-23246 / 3-24358 / 3-26114 / 3-35528 for 50 Tufts Street;
- RTNs 3-28231 / 3-30620 associated with MBTA/Green Line Extension work in the area;
- RTN 3-37468 for 31 Tufts Street associated with impacts from 50 Tufts Street; and
- RTN 3-14792 for 60 Tufts Street associated with asbestos only.

Relevant data from soil samples collected near the Tufts Street right-of-way are included on **Table 1** and the summary table above. Due to the age of the original VOC release associated with 50 Tufts Street, completed and ongoing remediation and/or Exposure Pathway Mitigation Measures (EPMM) at 23, 27, 31, 50, and 60 Tufts Street as well as 121 Washington Street, soil data more than 10 years old is not considered representative of current site conditions and was not included in the data summary tables. EPMMs include Active Exposure Pathway Mitigation Measures (AEPMM) and passive subslab venting systems. Furthermore, data was excluded if it was from more than 10 feet below grade or there was more recent data available between it and the right-of-way.

Based upon the above, the only relevant soil data for this CID was found in the Phase V Status Report No. 26 and Remedial Monitoring Report No. 41, 50 Tufts Street (GEI Consultants, Inc., August 2024). This submittal documents how on February 12, 2024, GEI collected shallow soil samples to the northwest and southeast of the 50 Tufts Street building, adjacent to street improvement work zone from 5 soil borings (B101 to B105) advanced up to 5 feet below grade. These soil boring locations are shown on **Figures 1 and 2**. Based upon the detected PCE and vinyl chloride concentrations all being below all their Method 1 Soil Standards as supported by the information presented herein, these soils are eligible for a CID.

Soil data from samples collected from B103 0-1' and B103 1-3' exhibit concentrations of PCE above its Method 1 Standards. Therefore, additional assessments will be performed in the area shown on **Figures 1 and 2** before these soils are managed under this CID. It is estimated that approximately 50 tons (35 CY) of soil will be excavated from the area around B103. In the immediate area of B103, excavation will be limited to what is required to reconstruct the existing sidewalk. The soil may be further characterized as work progresses to see if it meets this CID requirements. This will involve collecting soil samples from excavations in this area and submitting for laboratory CVOC analysis. A soil sample will be collected from the excavation area as work progresses at a rate



of no more than every 15 CY. If the reported CVOC concentrations in a sample are all less than their MCP Method 1 S-1/GW-1/GW-2/GW-3 Standards, the CID will be applicable to the soil represented by this sample.

A summary of VOC soil data identified by Atlas as relevant to this CID is presented in attached **Table 1** and included in the table above. The associated data summary table, figure and laboratory report from GEI's 2024 report previously submitted to MassDEP is also attached.

The soil management activities associated with this CID Petition will be conducted as a Utility-related Release Abatement Measure (URAM) under **RTN 3-51811**. The contract documents for the work estimate that up to 520 tons (approximately 375 cubic yards) of soil will require offsite management from the area represented by the soil data presented herein and covered by this CID, with the potential for an additional 50 tons (35 cubic yards) from around B103 if supported by data collected as work progresses. As noted above, most excess soil will come from less than 3 feet below grade with limited areas where stormwater catch basins are being replaced extending to 5 feet below grade. None of these deeper areas are located adjacent to the area excluded from this CID.

I understand that this "contained-in" determination is subject to a 21-day period during which the determination is subject to review by the MassDEP and that the soil cannot be managed as non-hazardous waste until the 21-day review period passes without objection from MassDEP or USEPA. A copy of the validated and unsigned BWSC-126 Miscellaneous Document Transmittal Form submitted concurrently with this CID is **Attached**.

I also understand that if the soil is to be transported out-of-state, it must first be determined if the operator of the landfill or other receiving facility and the relevant state agency (or the relevant USEPA region, if the state does not administer the RCRA program) are willing to accept contained-in determinations performed by a Massachusetts Licensed Site Professional. In doing so, the process by which "contained-in" determinations are performed in Massachusetts will be explained to the relevant parties and proper documentation of all conversations will be retained.

I, Michael Gitten, attest under the pains and penalties of perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this submittal, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the person or entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate or incomplete information.

Respectfully submitted,
ATLAS

By:  5/12/25

Signature Date

LSP #: 7505
LSP Name: Michael Gitten, LSP
Telephone: 781-404-1439

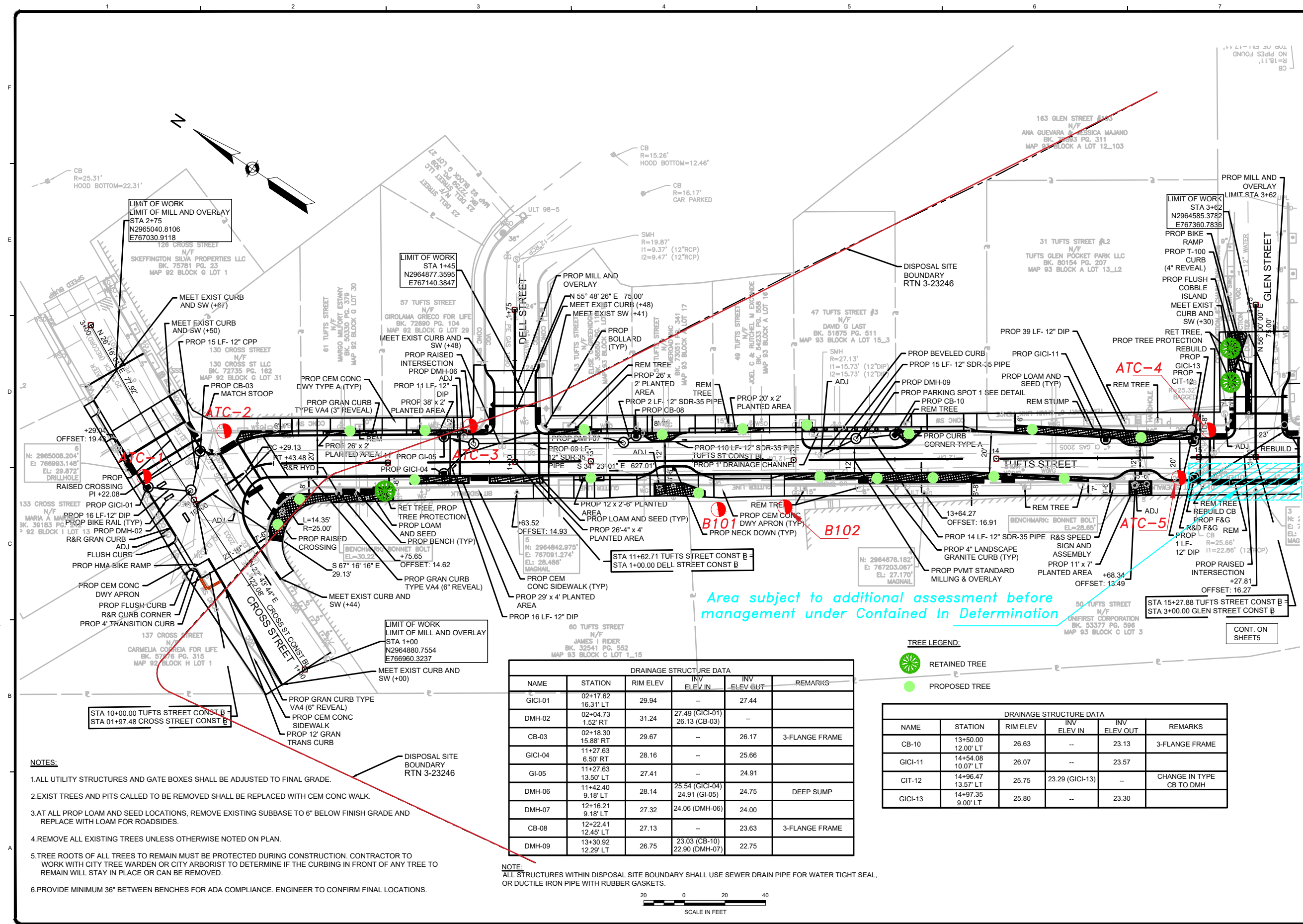
For: City of Somerville
Name of person or entity

Attachments: Figure 1 - Northwestern Project Extent
Figure 2 - Southeastern Project Extent
Table 1 - Soil analytical Data Summary
Laboratory Analytical Data Report – Atlas
Supporting Information from RTN 3-23246
Draft BWSC-126

Cc: Rebecca Wright, Somerville rwright@somervillema.gov File: cid petition-somerville-tufts st improvements-5.9.25

\\CORP.ATC\INT\ATC_FILES\SERVER\WOB_FILES\SERVER\VIRO\CLIENTS - PROJECTS\N - SOMERVILLE\TUFTS STREET\FIGURES & PLANS\CAD\DRAWING1.DWG, FIG 2 - PAGE 4

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NOTES:

1. ALL UTILITY STRUCTURES AND GATE BOXES SHALL BE ADJUSTED TO FINAL GRADE.
2. EXIST TREES AND PITS CALLED TO BE REMOVED SHALL BE REPLACED WITH CEM CONC WALK.
3. AT ALL PROP LOAM AND SEED LOCATIONS, REMOVE EXISTING SUBBASE TO 6" BELOW FINISH GRADE AND REPLACE WITH LOAM FOR ROADSIDES.
4. REMOVE ALL EXISTING TREES UNLESS OTHERWISE NOTED ON PLAN.
5. TREE ROOTS OF ALL TREES TO REMAIN MUST BE PROTECTED DURING CONSTRUCTION. CONTRACTOR TO WORK WITH CITY TREE WARDEN OR CITY ARBORIST TO DETERMINE IF THE CURBING IN FRONT OF ANY TREE TO REMAIN WILL STAY IN PLACE OR CAN BE REMOVED.
6. PROVIDE MINIMUM 36" BETWEEN BENCHES FOR ADA COMPLIANCE. ENGINEER TO CONFIRM FINAL LOCATIONS.

DRAINAGE STRUCTURE DATA					
NAME	STATION	RIM ELEV	INV ELEV IN	INV ELEV OUT	REMARKS
GICI-01	02+17.62 16.31' LT	29.94	--	27.44	
DMH-02	02+04.73 1.52' RT	31.24	27.49 (GICI-01) 26.13 (CB-03)	--	
CB-03	02+18.30 15.88' RT	29.67	--	26.17	3-FLANGE FRAME
GICI-04	11+27.63 6.50' RT	28.16	--	25.66	
GI-05	11+27.63 13.50' LT	27.41	--	24.91	
DMH-06	11+42.40 9.18' LT	28.14	25.54 (GICI-04) 24.91 (GI-05)	24.75	DEEP SUMP
DMH-07	12+16.21 9.18' LT	27.32	24.06 (DMH-06)	24.00	
CB-08	12+22.41 12.45' LT	27.13	--	23.63	3-FLANGE FRAME
DMH-09	13+30.92 12.29' LT	26.75	23.03 (CB-10) 22.90 (DMH-07)	22.75	

NOTE:
ALL STRUCTURES WITHIN DISPOSAL SITE BOUNDARY SHALL USE SEWER DRAIN PIPE FOR WATER TIGHT SEAL, OR DUCTILE IRON PIPE WITH RUBBER GASKETS.



TREE LEGEND:

- RETAINED TREE
- PROPOSED TREE

DRAINAGE STRUCTURE DATA					
NAME	STATION	RIM ELEV	INV ELEV IN	INV ELEV OUT	REMARKS
CB-10	13+50.00 12.00' LT	26.63	--	23.13	3-FLANGE FRAME
GICI-11	14+54.08 10.07' LT	26.07	--	23.57	
CIT-12	14+98.47 13.57' LT	25.75	23.29 (GICI-13)	--	CHANGE IN TYPE CB TO DMH
GICI-13	14+97.35 9.00' LT	25.80	--	23.30	



www.tetratech.com
100 Nickerson Road
Marlborough, Massachusetts 01752
Phone: (508) 786-2200 Fax: (508) 786-2201



Contained In Determination Petition
Northwestern Project Extent
City of Somerville
Tufts Street Right of Way Improvements
Somerville, MA

Project Number:
6000007464

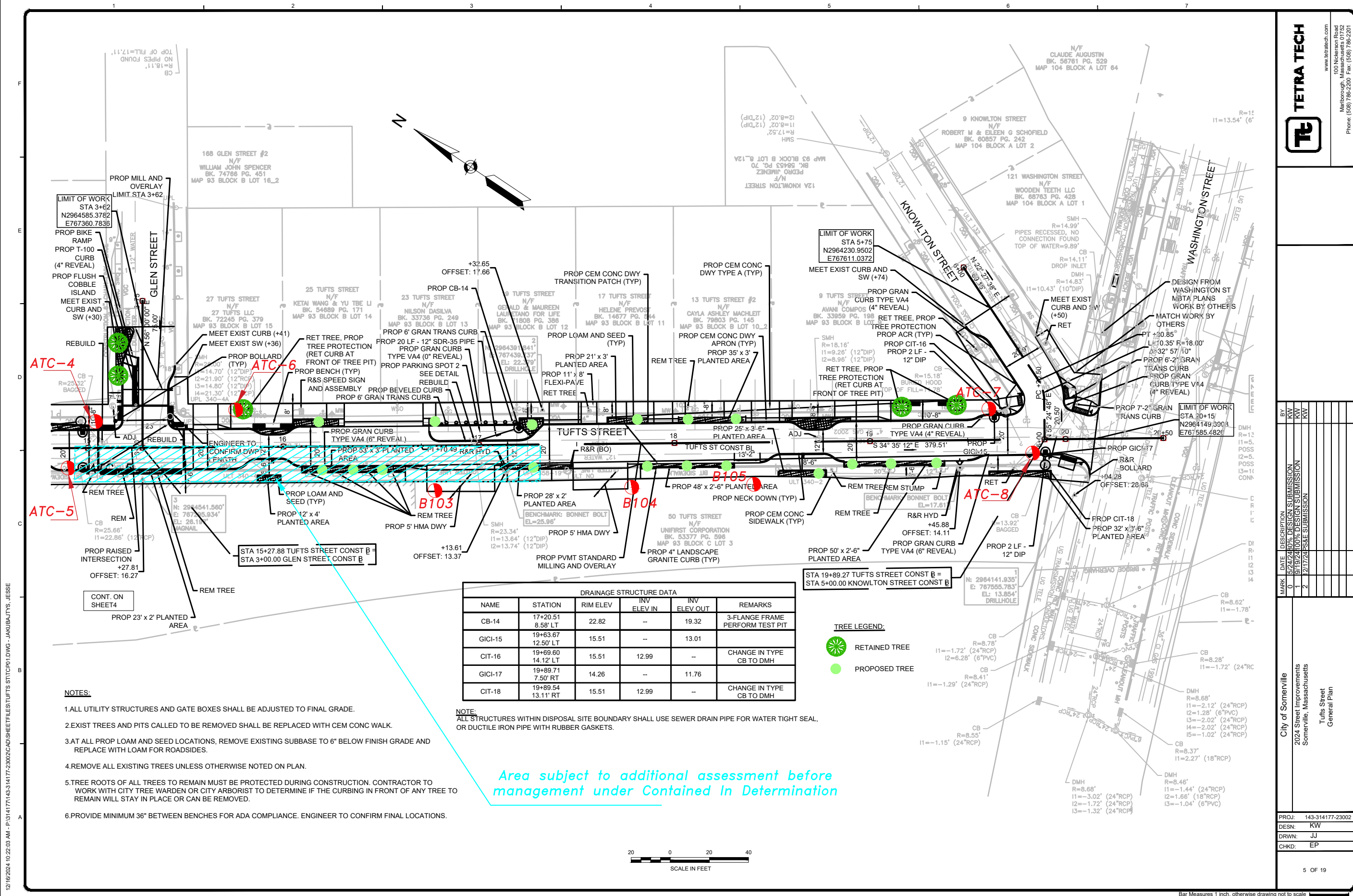
Date:
05/08/2025

Drn. By: AGI
Ckd. By: MSG

Scale:
AS SHOWN

Figure:

1



100 Nickerson Road
Norborough, Massachusetts 01752
Phone: (508) 750-2200 Fax: (508) 750-2201

MARK	DATE	DESCRIPTION
0	5/24/2024	100% DESIGN SUBMISSION
1	9/19/2024	100% DESIGN SUBMISSION
2	2/17/2025	PS&E SUBMISSION

City of Somerville	Tufts Street
2024 Street Improvements	General Plan
Somerville, Massachusetts	

PROJ:	143-314177-23002
DESIGN:	KW
DRWN:	JJ
CHKD:	EP

5 OF 19

Contained In Determination Petition Southeastern Project Extent

City of Somerville
Tufts Street Right of Way Improvements
Somerville, MA

Project Number:
6000007464

Date:
05/08/2025

Dwn. By:
AGL

Ckd. By:
MSG

Scale:
AS SHOWN

Figure:

Table 1 - Soil Analytical Data Summary
Tufts Street - Somerville, MA

	MCP Method 1 Standards			ATC-1	ATC-1	ATC-2	ATC-2	ATC-3	ATC-3	ATC-4	ATC-4	ATC-5	ATC-5	ATC-6	ATC-6	ATC-7
Laboritory ID				620-17450-5	620-17450-6	620-17450-3	620-17450-4	620-17450-1	620-17450-2	620-17450-15	620-17450-16	620-17450-17	620-17450-18	620-17450-13	620-17450-14	620-17450-11
Sample Depth (feet)	S-1/GW-1	S-1/GW-2	S-1/GW-3	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5
Sample Collection Date				3/15/24	3/15/24	3/15/24	3/15/24	3/15/24	3/15/24	3/14/24	3/14/24	3/14/24	3/14/24	3/14/24	3/14/24	3/14/24
units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Headspace PID Reading (ppmv)				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Volatile Organic Compounds (VOCs) by EPA Method 8260C (mg/kg)																
Tetrachloroethene (PCE)	1	4	100	< 0.00469	< 0.00532	< 0.00546	< 0.00641	< 0.00984	< 0.00516	<0.00504	< 0.00526	<0.00492	< 0.00443	< 0.00521	< 0.00575	< 0.00.67
Trichloroethene (TCE)	0.3	0.3	30	< 0.00469	< 0.00532	< 0.00546	< 0.00641	< 0.00984	< 0.00516	<0.00504	< 0.00526	<0.00492	< 0.00443	< 0.00521	< 0.00575	< 0.00.67
cis-1,2-Dichloroethene	0.3	0.1	100	< 0.00469	< 0.00532	< 0.00546	< 0.00641	< 0.00984	< 0.00516	<0.00504	< 0.00526	<0.00492	< 0.00443	< 0.00521	< 0.00575	< 0.00.67
trans-1,2-Dichloroethane	1	1	500	< 0.00469	< 0.00532	< 0.00546	< 0.00641	< 0.00984	< 0.00516	<0.00504	< 0.00526	<0.00492	< 0.00443	< 0.00521	< 0.00575	< 0.00.67
1,2-Dichloroethane (total)	0.1	0.1	30	< 0.00469	< 0.00532	< 0.00546	< 0.00641	< 0.00984	< 0.00516	<0.00504	< 0.00526	<0.00492	< 0.00443	< 0.00521	< 0.00575	< 0.00.67
Vinyl chloride	0.3	0.3	0.3	< 0.00469	< 0.00532	< 0.00546	< 0.00641	< 0.00984	< 0.00516	<0.00504	< 0.00526	<0.00492	< 0.00443	< 0.00521	< 0.00575	< 0.00.67
Chlorobenzene	1	3	100	< 0.00469	< 0.00532	< 0.00546	< 0.00641	< 0.00984	< 0.00516	<0.00504	< 0.00526	<0.00492	< 0.00443	< 0.00521	< 0.00575	< 0.00.67
Methylene Chloride(Dichloromethane)	0.1	3	300	< 0.00938	< 0.0106	<0.0109	< 0.0128	< 0.0197	< 0.0103	< 0.0101	< 0.0105	< 0.0985	< 0.0887	< 0.0104	< 0.0115	< 0.00934
Toluene	30	500	500	< 0.00469	< 0.00532	< 0.00546	< 0.00641	< 0.00984	< 0.00516	<0.00504	< 0.00526	<0.00492	< 0.00443	< 0.00521	< 0.00575	< 0.00.67

Notes:

MCP = Massachusetts Contingency Plan; 310 CMR 40.0000 (3/1/24)

mg/Kg = milligrams per kilogram

Bold indicates detected above laboratory method reporting limit

Green shading indicates above Method 1 S-1 GW-1 Standard

Yellow shading indicates above Method 1 S-1/GW-1 and S-1/GW-2 Standard

NA = Not Analyzed

Table 1 - Soil Analytical Data Summary
Tufts Street - Somerville, MA

	MCP Method 1 Standards			ATC-7	ATC-8	ATC-8	ATC-1 to ATC-8 Composite	ATC-1 to ATC-8 Composite	50TUFT-B101	50TUFT-B101	50TUFT-B101	50TUFT-B102	50TUFT-B102	50TUFT-B103 (Not included in CID)	50TUFT-B103 (Not included in CID)	50TUFT-B103 (Not included in CID)
Laboratory ID				620-17450-12	620-17450-9	620-17450-10	620-17450-7	620-17450-8	L2408101-01	L2408101-02	L2408101-03	L2408101-04	L2408101-05	L2408101-06	L2408101-07	L2408101-08
Sample Depth (feet)	S-1/GW-1	S-1/GW-2	S-1/GW-3	5-10	0-5	5-10	0-5	5-10	0-1	1-3	3-5	0-1	1-3	0-1	1-3	3-5
Sample Collection Date				3/14/24	3/14/24	3/14/24	3/15/24	3/15/24	2/12/24	2/12/24	2/12/24	2/12/24	2/12/24	2/12/24	2/12/24	2/12/24
units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Headspace PID Reading (ppmv)				0.0	0.0	0.0	NA	NA	0.0	0.0	0.0	0.0	0.1	0.6	21.8	0.1
Volatile Organic Compounds (VOCs) by EPA Method 8260C (mg/kg)																
Tetrachloroethene (PCE)	1	4	100	< 0.0126	< 0.00619	0.0134	NA	NA	0.0023	<0.00033	0.015	0.00048	0.001	100	2.8	0.00052
Trichloroethene (TCE)	0.3	0.3	30	< 0.0126	< 0.00619	< 0.00494	NA	NA	<0.00037	<0.00033	<0.00026	<0.00032	0.00037	0.24	<0.031	<0.00032
cis-1,2-Dichloroethene	0.3	0.1	100	< 0.0126	< 0.00619	< 0.00494	NA	NA	<0.00074	<0.00066	<0.00051	<0.00064	<0.00058	0.094	<0.061	<0.00063
trans-1,2-Dichloroethane	1	1	500	< 0.0126	< 0.00619	< 0.00494	NA	NA	<0.00074	<0.00066	<0.00051	<0.00064	<0.00058	<0.046	<0.061	<0.00063
1,2-Dichloroethane (total)	0.1	0.1	30	< 0.0126	< 0.00619	< 0.00494	NA	NA	<0.00074	<0.00066	<0.00051	<0.00064	<0.00058	0.094	<0.061	<0.00063
Vinyl chloride	0.3	0.3	0.3	< 0.0126	< 0.00619	< 0.00494	NA	NA	<0.00074	<0.00066	<0.00051	<0.00064	<0.00058	<0.046	<0.061	<0.00063
Chlorobenzene	1	3	100	< 0.0126	< 0.00619	< 0.00494	NA	NA	<0.00037	<0.00033	<0.00026	<0.00032	<0.00029	<0.023	<0.031	<0.00032
Methylene Chloride(Dichloromethane)	0.1	3	300	< 0.0253	< 0.0124	< 0.00988	NA	NA	<0.0074	<0.0066	<0.0051	<0.0064	<0.0029	<0.230	<0.310	<0.0063
Toluene	30	500	500	< 0.0126	< 0.00619	< 0.00494	NA	NA	<0.00074	<0.00066	<0.00051	<0.00064	<0.00058	<0.046	<0.061	<0.00063

Notes:
MCP = Massachusetts Contingency Plan; 310 CMR 40.0000 (3/1/24)
mg/Kg = milligrams per kilogram
Bold indicates detected above laboratory method reporting limit
Green shading indicates above Method 1 S-1 GW-1 Standard
Yellow shading indicates above Method 1 S-1/GW-1 and S-1/GW-2 Standard
NA = Not Analyzed

Table 1 - Soil Analytical Data Summary
Tufts Street - Somerville, MA

	MCP Method 1 Standards			50TUFT-B104	50TUFT-B104	50TUFT-B104	50TUFT-B105	50TUFT-B105
Laboratory ID				L2408101-09	L2408101-10	L2408101-11	L2408101-12	L2408101-13
Sample Depth (feet)	S-1/GW-1	S-1/GW-2	S-1/GW-3	0-1	1-3	3-5	0-1	1-3
Sample Collection Date				2/12/24	2/12/24	2/12/24	2/12/24	2/12/24
units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Headspace PID Reading (ppmv)				0.1	0.9	0.3	0.0	0.1
Volatile Organic Compounds (VOCs) by EPA Method 8260C (mg/kg)								
Tetrachloroethene (PCE)	1	4	100	0.023	0.015	0.0024	0.81	0.01
Trichloroethene (TCE)	0.3	0.3	30	<0.00029	<0.00033	<0.00044	<0.022	<0.00061
cis-1,2-Dichloroethene	0.3	0.1	100	<0.00057	<0.00067	<0.00088	<0.044	<0.0012
trans-1,2-Dichloroethane	1	1	500	<0.00057	<0.00067	<0.00088	<0.044	<0.0012
1,2-Dichloroethane (total)	0.1	0.1	30	<0.00057	<0.00067	<0.00088	<0.044	<0.0012
Vinyl chloride	0.3	0.3	0.3	<0.00057	<0.00067	<0.00088	0.053	<0.0012
Chlorobenzene	1	3	100	<0.00029	<0.00033	<0.00044	<0.022	<0.00061
Methylene Chloride(Dichloromethane)	0.1	3	300	<0.0057	<0.0067	<0.0088	<0.220	<0.0061
Toluene	30	500	500	<0.00057	<0.00067	<0.00088	0.053	<0.0012

Notes:

MCP = Massachusetts Contingency Plan; 310 CMR 40.0000 (3/1/24)

mg/Kg = milligrams per kilogram

Bold indicates detected above laboratory method reporting limit

Green shading indicates above Method 1 S-1 GW-1 Standard

Yellow shading indicates above Method 1 S-1/GW-1 and S-1/GW-2 Standard

NA = Not Analyzed



MassDEP RTN 3-23246

Phase V Status Report No. 26 and Remedial Monitoring Report No. 41

50 Tufts Street, Somerville, Massachusetts

Submitted to:

UniFirst Corporation
68 Jonspin Road
Wilmington, MA 01887

Submitted by:

GEI Consultants, Inc.
400 Unicorn Park Drive
Woburn, MA 01801
781.721.4000

August 7, 2024
Project No. 04516-3



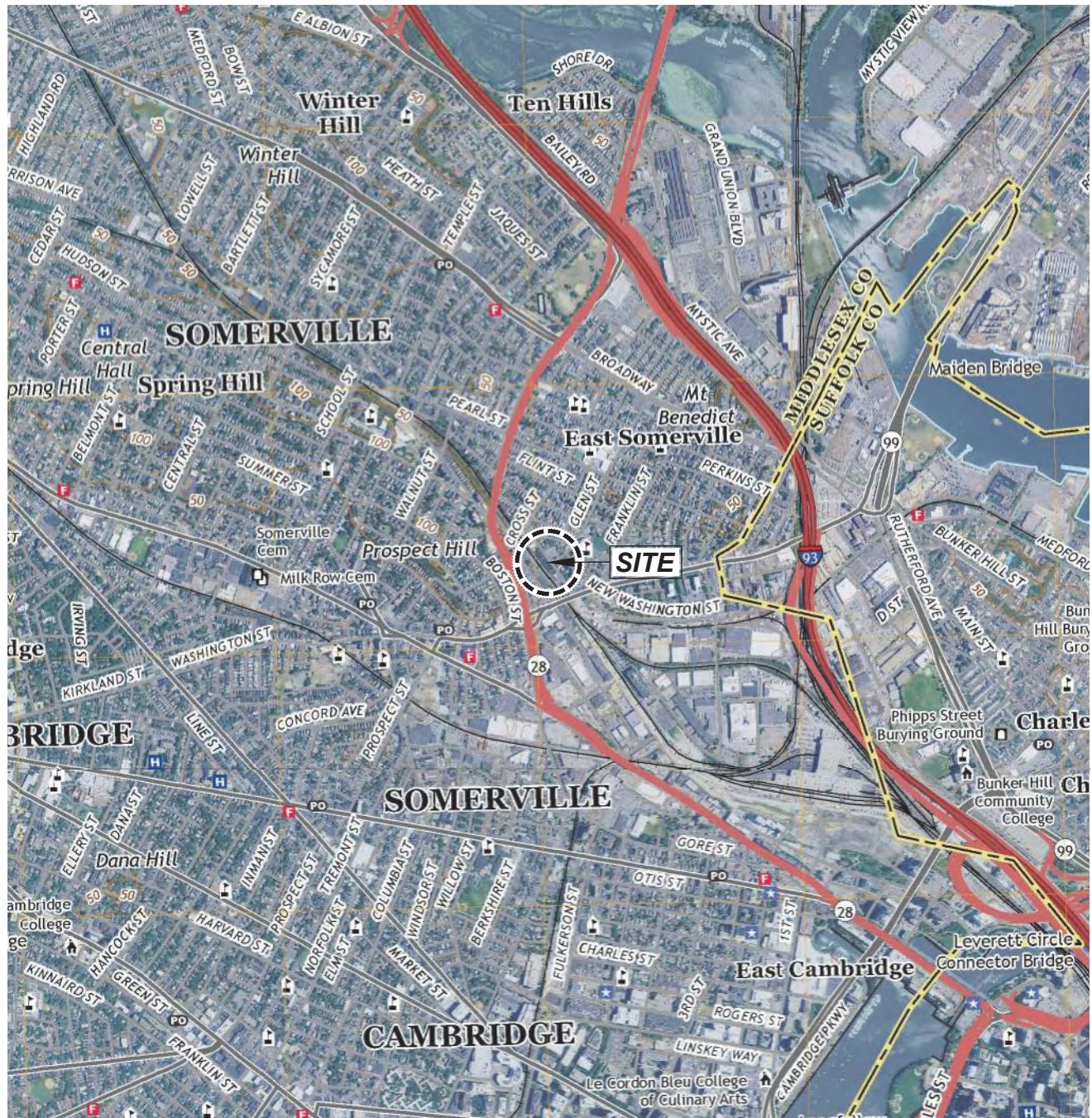
Christopher O. Coner, CHMM
Project Manager

Ileen S. Gladstone, P.E., LSP, LEED AP
Senior Vice President

Table 10-1. Chemical Testing Results - 50 Tufts Street Shallow Soil
Phase V Status Report No. 26 and Remedial Monitoring Report No. 41
50 Tufts Street
Somerville, Massachusetts

Sample ID: 50TUFT-B101(0-1) Sample Date: 2/12/2024 Sample Depth (ft): 0-1			50TUFT-B101(1-3) 2/12/2024 1-3	50TUFT-B101(3-5) 2/12/2024 3-5	50TUFT-B102(0-1) 2/12/2024 0-1	50TUFT-B102(1-3) 2/12/2024 1-3	50TUFT-B103(0-1) 2/12/2024 0-1	50TUFT-B103(1-3) 2/12/2024 1-3	50TUFT-B103(3-5) 2/12/2024 3-5	50TUFT-B104(0-1) 2/12/2024 0-1	50TUFT-B104(1-3) 2/12/2024 1-3	50TUFT-B104(3-5) 2/12/2024 3-5	50TUFT-B105(0-1) 2/12/2024 0-1	50TUFT-B105(1-3) 2/12/2024 1-3	
Analyte	MCP Upper Concentration Limit (UCL)	Units													
Volatile Organics Compounds (VOCs)			mg/kg												
1,2-Dichloroethene, Total			<0.00074	<0.00066	<0.00051	<0.00064	<0.00058	0.094	<0.061	<0.00063	<0.00057	<0.00067	<0.00088	<0.044	<0.0012
cis-1,2-Dichloroethene	5000		<0.00074	<0.00066	<0.00051	<0.00064	<0.00058	0.094	<0.061	<0.00063	<0.00057	<0.00067	<0.00088	<0.044	<0.0012
Tetrachloroethene	10000		0.0023	<0.00033	0.015	0.00048	0.001	100	2.8	0.00052	0.023	0.015	0.0024	0.81	0.01
Toluene	10000		<0.00074	<0.00066	<0.00051	<0.00064	<0.00058	<0.046	<0.061	<0.00063	<0.00057	<0.00067	<0.00088	0.053	<0.0012
Trichloroethene	600		<0.00037	<0.00033	<0.00026	<0.00032	0.00037	0.24	<0.031	<0.00032	<0.00029	<0.00033	<0.00044	<0.022	<0.00061
General Chemistry															
Solids, Total		%	80	89.7	91.1	93.6	91.6	90.1	81.4	85.7	90.8	79.6	82.3	92.1	82.8

Figures



This Image is from U.S.G.S. Topographic 7.5 Minute Series
 Boston North, MA Quadrangle, 2018.
 Datum is North American Vertical Datum of 1988 (NAVD88).
 Contour Interval is 10 Feet.



Phase V Status Report No. 26 and
 Remedial Monitoring Report No. 41
 50 Tufts Street Somerville, Massachusetts

UniFirst Corporation
 Wilmington, Massachusetts

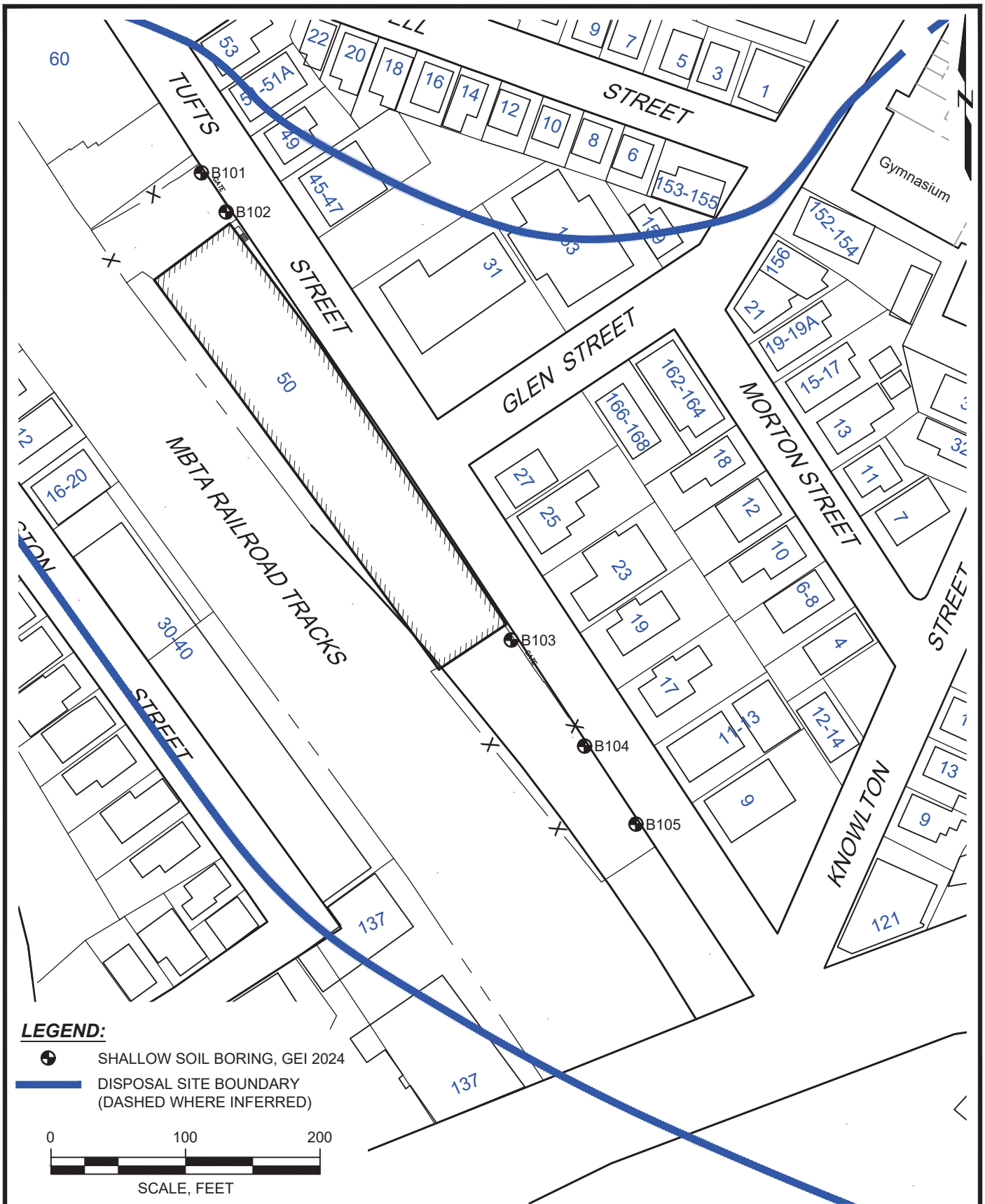


Project 04516-3

SITE LOCATION MAP

August 2024

Fig. 1



Phase V Status Report No. 26 and RMR No. 41
50 Tufts Street
Somerville, Massachusetts

Wooden Teeth LLC
Wilmington, Massachusetts



Project 045163

50 TUFTS STREET
SHALLOW SOIL BORING PLAN

August 2024

Fig. 10-1



ANALYTICAL REPORT

Lab Number:	L2408101
Client:	GEI Consultants 400 Unicorn Park Drive Woburn, MA 01801
ATTN:	Chris Coner
Phone:	(781) 721-4000
Project Name:	TUFTS STREET
Project Number:	045163
Report Date:	02/21/24

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OH (CL108), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2408101
Report Date: 02/21/24

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2408101-01	50TUFT-B101(0-1)	SOIL	SOMERVILLE, MA	02/12/24 08:30	02/14/24
L2408101-02	50TUFT-B101(1-3)	SOIL	SOMERVILLE, MA	02/12/24 08:31	02/14/24
L2408101-03	50TUFT-B101(3-5)	SOIL	SOMERVILLE, MA	02/12/24 08:32	02/14/24
L2408101-04	50TUFT-B102(0-1)	SOIL	SOMERVILLE, MA	02/12/24 09:00	02/14/24
L2408101-05	50TUFT-B102(1-3)	SOIL	SOMERVILLE, MA	02/12/24 09:01	02/14/24
L2408101-06	50TUFT-B103(0-1)	SOIL	SOMERVILLE, MA	02/12/24 09:30	02/14/24
L2408101-07	50TUFT-B103(1-3)	SOIL	SOMERVILLE, MA	02/12/24 09:31	02/14/24
L2408101-08	50TUFT-B103(3-5)	SOIL	SOMERVILLE, MA	02/12/24 09:32	02/14/24
L2408101-09	50TUFT-B104(0-1)	SOIL	SOMERVILLE, MA	02/12/24 10:00	02/14/24
L2408101-10	50TUFT-B104(1-3)	SOIL	SOMERVILLE, MA	02/12/24 10:01	02/14/24
L2408101-11	50TUFT-B104(3-5)	SOIL	SOMERVILLE, MA	02/12/24 10:02	02/14/24
L2408101-12	50TUFT-B105(0-1)	SOIL	SOMERVILLE, MA	02/12/24 11:00	02/14/24
L2408101-13	50TUFT-B105(1-3)	SOIL	SOMERVILLE, MA	02/12/24 11:01	02/14/24

Project Name: TUFTS STREET

Lab Number: L2408101

Project Number: 045163

Report Date: 02/21/24

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES
A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	NO
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	NO
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	YES
For any questions answered "No", please refer to the case narrative section on the following page(s).		

Please note that sample matrix information is located in the Sample Results section of this report.



Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2408101
Report Date: 02/21/24

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2408101
Report Date: 02/21/24

Case Narrative (continued)

MCP Related Narratives

Volatile Organics

L2408101-06: Initial calibration utilized a quadratic fit for: 1,1-dichloropropene

L2408101-06D: A copy of the continuing calibration standard is included as an addendum to this report.

In reference to question G:

L2408101-06, -07, and -12: One or more of the target analytes did not achieve the requested CAM reporting limits.

In reference to question H:

The WG1887347-5 Method Blank, associated with L2408101-06, has a concentration above the reporting limit for chloroform. Since the associated sample concentration is either greater than 10x the blank concentration or non-detect to the RL for this target analyte, no corrective action is required. Any result detected below the reporting limit is qualified with a "B".

L2408101-01, -02, -03, -04, -05, -07, -08, -09, -10, -11, -12, and -13: Initial Calibration did not meet:

Lowest Calibration Standard Minimum Response Factor: bromochloromethane (0.0979), bromodichloromethane (0.2758), 1,4-dioxane (0.0014), cis-1,3-dichloropropene (0.2950), 1,1,2-trichloroethane (0.1932)

Average Response Factor: 1,4-dioxane

Verification: carbon disulfide (69%)

L2408101-06: Initial Calibration did not meet:

Lowest Calibration Standard Minimum Response Factor: 1,4-dioxane (0.0018)

Average Response Factor: 1,4-dioxane

L2408101-01, -02, -03, -04, -05, -06, -07, -08, -09, -10, -11, -12, and -13: The associated continuing calibration standard is outside the acceptance criteria for several compounds; however, it is within overall method allowances. Associated results are considered to be biased high if the %D is negative and biased low if the %D is positive. A copy of the continuing calibration standard is included as an addendum to this report.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:



Kelly O'Neill

Title: Technical Director/Representative

Date: 02/21/24

QC OUTLIER SUMMARY REPORT

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2408101

Report Date: 02/21/24

Method	Client ID (Native ID)	Lab ID	Parameter	QC Type	Recovery/RPD (%)	QC Limits (%)	Associated Samples	Data Quality Assessment
MCP Volatile Organics by EPA 5035 High - Westborough Lab								
8260D	Batch QC	WG1886042-3	Chloromethane	LCS	67	70-130	07,12	potential low bias
8260D	Batch QC	WG1886042-3	1,1-Dichloroethene	LCS	68	70-130	07,12	potential low bias
8260D	Batch QC	WG1886042-3	Dichlorodifluoromethane	LCS	62	70-130	07,12	potential low bias
8260D	Batch QC	WG1886042-3	Acetone	LCS	64	70-130	07,12	potential low bias
8260D	Batch QC	WG1886042-3	Carbon disulfide	LCS	68	70-130	07,12	potential low bias
8260D	Batch QC	WG1886042-3	Tetrahydrofuran	LCS	65	70-130	07,12	potential low bias
8260D	Batch QC	WG1886042-4	Chloromethane	LCSD	67	70-130	07,12	potential low bias
8260D	Batch QC	WG1886042-4	1,1-Dichloroethene	LCSD	68	70-130	07,12	potential low bias
8260D	Batch QC	WG1886042-4	Dichlorodifluoromethane	LCSD	62	70-130	07,12	potential low bias
8260D	Batch QC	WG1886042-4	Acetone	LCSD	64	70-130	07,12	potential low bias
8260D	Batch QC	WG1886042-4	Carbon disulfide	LCSD	68	70-130	07,12	potential low bias
8260D	Batch QC	WG1886042-4	Tetrahydrofuran	LCSD	64	70-130	07,12	potential low bias
8260D	Batch QC	WG1887347-3	Chloromethane	LCS	68	70-130	06	potential low bias
8260D	Batch QC	WG1887347-3	Dichlorodifluoromethane	LCS	49	70-130	06	potential low bias
8260D	Batch QC	WG1887347-3	Acetone	LCS	68	70-130	06	potential low bias
8260D	Batch QC	WG1887347-3	Methyl ethyl ketone	LCS	62	70-130	06	potential low bias
8260D	Batch QC	WG1887347-3	Methyl isobutyl ketone	LCS	69	70-130	06	potential low bias
8260D	Batch QC	WG1887347-3	2-Hexanone	LCS	64	70-130	06	potential low bias
8260D	Batch QC	WG1887347-3	Tetrahydrofuran	LCS	58	70-130	06	potential low bias
8260D	Batch QC	WG1887347-4	Chloromethane	LCSD	64	70-130	06	potential low bias
8260D	Batch QC	WG1887347-4	Dichlorodifluoromethane	LCSD	46	70-130	06	potential low bias
8260D	Batch QC	WG1887347-4	Acetone	LCSD	67	70-130	06	potential low bias
8260D	Batch QC	WG1887347-4	Methyl ethyl ketone	LCSD	65	70-130	06	potential low bias
8260D	Batch QC	WG1887347-4	2-Hexanone	LCSD	65	70-130	06	potential low bias
8260D	Batch QC	WG1887347-4	Tetrahydrofuran	LCSD	63	70-130	06	potential low bias
8260D	Batch QC	WG1887734-3	Chloromethane	LCS	66	70-130	06	potential low bias
8260D	Batch QC	WG1887734-3	Dichlorodifluoromethane	LCS	41	70-130	06	potential low bias
8260D	Batch QC	WG1887734-3	Methyl ethyl ketone	LCS	68	70-130	06	potential low bias
8260D	Batch QC	WG1887734-3	2-Hexanone	LCS	69	70-130	06	potential low bias

QC OUTLIER SUMMARY REPORT

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2408101

Report Date: 02/21/24

Method	Client ID (Native ID)	Lab ID	Parameter	QC Type	Recovery/RPD (%)	QC Limits (%)	Associated Samples	Data Quality Assessment
8260D	Batch QC	WG1887734-3	Tetrahydrofuran	LCS	64	70-130	06	potential low bias
8260D	Batch QC	WG1887734-4	Chloromethane	LCSD	65	70-130	06	potential low bias
8260D	Batch QC	WG1887734-4	Dichlorodifluoromethane	LCSD	41	70-130	06	potential low bias
8260D	Batch QC	WG1887734-4	Acetone	LCSD	69	70-130	06	potential low bias
8260D	Batch QC	WG1887734-4	Tetrahydrofuran	LCSD	64	70-130	06	potential low bias
MCP Volatile Organics by EPA 5035 Low - Westborough Lab								
8260D	Batch QC	WG1886062-3	Chloromethane	LCS	67	70-130	01-05,08-11,13	potential low bias
8260D	Batch QC	WG1886062-3	1,1-Dichloroethene	LCS	68	70-130	01-05,08-11,13	potential low bias
8260D	Batch QC	WG1886062-3	Dichlorodifluoromethane	LCS	62	70-130	01-05,08-11,13	potential low bias
8260D	Batch QC	WG1886062-3	Acetone	LCS	64	70-130	01-05,08-11,13	potential low bias
8260D	Batch QC	WG1886062-3	Carbon disulfide	LCS	68	70-130	01-05,08-11,13	potential low bias
8260D	Batch QC	WG1886062-3	Tetrahydrofuran	LCS	65	70-130	01-05,08-11,13	potential low bias
8260D	Batch QC	WG1886062-4	Chloromethane	LCSD	67	70-130	01-05,08-11,13	potential low bias
8260D	Batch QC	WG1886062-4	1,1-Dichloroethene	LCSD	68	70-130	01-05,08-11,13	potential low bias
8260D	Batch QC	WG1886062-4	Dichlorodifluoromethane	LCSD	62	70-130	01-05,08-11,13	potential low bias
8260D	Batch QC	WG1886062-4	Acetone	LCSD	64	70-130	01-05,08-11,13	potential low bias
8260D	Batch QC	WG1886062-4	Carbon disulfide	LCSD	68	70-130	01-05,08-11,13	potential low bias
8260D	Batch QC	WG1886062-4	Tetrahydrofuran	LCSD	64	70-130	01-05,08-11,13	potential low bias

ORGANICS

VOLATILES

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-01
 Client ID: 50TUFT-B101(0-1)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 08:30
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 141,8260D
 Analytical Date: 02/15/24 15:23
 Analyst: MAG
 Percent Solids: 80%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	3.7	--	1
1,1-Dichloroethane	ND		ug/kg	0.74	--	1
Chloroform	ND		ug/kg	1.1	--	1
Carbon tetrachloride	ND		ug/kg	0.74	--	1
1,2-Dichloropropane	ND		ug/kg	0.74	--	1
Dibromochloromethane	ND		ug/kg	0.74	--	1
1,1,2-Trichloroethane	ND		ug/kg	0.74	--	1
Tetrachloroethene	2.3		ug/kg	0.37	--	1
Chlorobenzene	ND		ug/kg	0.37	--	1
Trichlorofluoromethane	ND		ug/kg	2.9	--	1
1,2-Dichloroethane	ND		ug/kg	0.74	--	1
1,1,1-Trichloroethane	ND		ug/kg	0.37	--	1
Bromodichloromethane	ND		ug/kg	0.37	--	1
trans-1,3-Dichloropropene	ND		ug/kg	0.74	--	1
cis-1,3-Dichloropropene	ND		ug/kg	0.37	--	1
1,3-Dichloropropene, Total	ND		ug/kg	0.37	--	1
1,1-Dichloropropene	ND		ug/kg	0.37	--	1
Bromoform	ND		ug/kg	2.9	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.37	--	1
Benzene	ND		ug/kg	0.37	--	1
Toluene	ND		ug/kg	0.74	--	1
Ethylbenzene	ND		ug/kg	0.74	--	1
Chloromethane	ND		ug/kg	2.9	--	1
Bromomethane	ND		ug/kg	1.5	--	1
Vinyl chloride	ND		ug/kg	0.74	--	1
Chloroethane	ND		ug/kg	1.5	--	1
1,1-Dichloroethene	ND		ug/kg	0.74	--	1
trans-1,2-Dichloroethene	ND		ug/kg	1.1	--	1

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-01
 Client ID: 50TUFT-B101(0-1)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 08:30
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.37	--	1
1,2-Dichlorobenzene	ND		ug/kg	1.5	--	1
1,3-Dichlorobenzene	ND		ug/kg	1.5	--	1
1,4-Dichlorobenzene	ND		ug/kg	1.5	--	1
Methyl tert butyl ether	ND		ug/kg	1.5	--	1
p/m-Xylene	ND		ug/kg	1.5	--	1
o-Xylene	ND		ug/kg	0.74	--	1
Xylenes, Total	ND		ug/kg	0.74	--	1
cis-1,2-Dichloroethene	ND		ug/kg	0.74	--	1
1,2-Dichloroethene, Total	ND		ug/kg	0.74	--	1
Dibromomethane	ND		ug/kg	1.5	--	1
1,2,3-Trichloropropane	ND		ug/kg	1.5	--	1
Styrene	ND		ug/kg	0.74	--	1
Dichlorodifluoromethane	ND		ug/kg	7.4	--	1
Acetone	ND		ug/kg	18	--	1
Carbon disulfide	ND		ug/kg	7.4	--	1
Methyl ethyl ketone	ND		ug/kg	7.4	--	1
Methyl isobutyl ketone	ND		ug/kg	7.4	--	1
2-Hexanone	ND		ug/kg	7.4	--	1
Bromochloromethane	ND		ug/kg	1.5	--	1
Tetrahydrofuran	ND		ug/kg	2.9	--	1
2,2-Dichloropropane	ND		ug/kg	1.5	--	1
1,2-Dibromoethane	ND		ug/kg	0.74	--	1
1,3-Dichloropropane	ND		ug/kg	1.5	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.37	--	1
Bromobenzene	ND		ug/kg	1.5	--	1
n-Butylbenzene	ND		ug/kg	0.74	--	1
sec-Butylbenzene	ND		ug/kg	0.74	--	1
tert-Butylbenzene	ND		ug/kg	1.5	--	1
o-Chlorotoluene	ND		ug/kg	1.5	--	1
p-Chlorotoluene	ND		ug/kg	1.5	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.2	--	1
Hexachlorobutadiene	ND		ug/kg	2.9	--	1
Isopropylbenzene	ND		ug/kg	0.74	--	1
p-Isopropyltoluene	ND		ug/kg	0.74	--	1
Naphthalene	ND		ug/kg	2.9	--	1
n-Propylbenzene	ND		ug/kg	0.74	--	1

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-01
 Client ID: 50TUFT-B101(0-1)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 08:30
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/kg	1.5	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.5	--	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.5	--	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.5	--	1
Diethyl ether	ND		ug/kg	1.5	--	1
Diisopropyl Ether	ND		ug/kg	1.5	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	1.5	--	1
Tertiary-Amyl Methyl Ether	ND		ug/kg	1.5	--	1
1,4-Dioxane	ND		ug/kg	59	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	95		70-130

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-02
 Client ID: 50TUFT-B101(1-3)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 08:31
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 141,8260D
 Analytical Date: 02/15/24 15:54
 Analyst: MAG
 Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	3.3	--	1
1,1-Dichloroethane	ND		ug/kg	0.66	--	1
Chloroform	ND		ug/kg	0.99	--	1
Carbon tetrachloride	ND		ug/kg	0.66	--	1
1,2-Dichloropropane	ND		ug/kg	0.66	--	1
Dibromochloromethane	ND		ug/kg	0.66	--	1
1,1,2-Trichloroethane	ND		ug/kg	0.66	--	1
Tetrachloroethene	ND		ug/kg	0.33	--	1
Chlorobenzene	ND		ug/kg	0.33	--	1
Trichlorofluoromethane	ND		ug/kg	2.6	--	1
1,2-Dichloroethane	ND		ug/kg	0.66	--	1
1,1,1-Trichloroethane	ND		ug/kg	0.33	--	1
Bromodichloromethane	ND		ug/kg	0.33	--	1
trans-1,3-Dichloropropene	ND		ug/kg	0.66	--	1
cis-1,3-Dichloropropene	ND		ug/kg	0.33	--	1
1,3-Dichloropropene, Total	ND		ug/kg	0.33	--	1
1,1-Dichloropropene	ND		ug/kg	0.33	--	1
Bromoform	ND		ug/kg	2.6	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.33	--	1
Benzene	ND		ug/kg	0.33	--	1
Toluene	ND		ug/kg	0.66	--	1
Ethylbenzene	ND		ug/kg	0.66	--	1
Chloromethane	ND		ug/kg	2.6	--	1
Bromomethane	ND		ug/kg	1.3	--	1
Vinyl chloride	ND		ug/kg	0.66	--	1
Chloroethane	ND		ug/kg	1.3	--	1
1,1-Dichloroethene	ND		ug/kg	0.66	--	1
trans-1,2-Dichloroethene	ND		ug/kg	0.99	--	1

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-02
 Client ID: 50TUFT-B101(1-3)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 08:31
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.33	--	1
1,2-Dichlorobenzene	ND		ug/kg	1.3	--	1
1,3-Dichlorobenzene	ND		ug/kg	1.3	--	1
1,4-Dichlorobenzene	ND		ug/kg	1.3	--	1
Methyl tert butyl ether	ND		ug/kg	1.3	--	1
p/m-Xylene	ND		ug/kg	1.3	--	1
o-Xylene	ND		ug/kg	0.66	--	1
Xylenes, Total	ND		ug/kg	0.66	--	1
cis-1,2-Dichloroethene	ND		ug/kg	0.66	--	1
1,2-Dichloroethene, Total	ND		ug/kg	0.66	--	1
Dibromomethane	ND		ug/kg	1.3	--	1
1,2,3-Trichloropropane	ND		ug/kg	1.3	--	1
Styrene	ND		ug/kg	0.66	--	1
Dichlorodifluoromethane	ND		ug/kg	6.6	--	1
Acetone	ND		ug/kg	16	--	1
Carbon disulfide	ND		ug/kg	6.6	--	1
Methyl ethyl ketone	ND		ug/kg	6.6	--	1
Methyl isobutyl ketone	ND		ug/kg	6.6	--	1
2-Hexanone	ND		ug/kg	6.6	--	1
Bromochloromethane	ND		ug/kg	1.3	--	1
Tetrahydrofuran	ND		ug/kg	2.6	--	1
2,2-Dichloropropane	ND		ug/kg	1.3	--	1
1,2-Dibromoethane	ND		ug/kg	0.66	--	1
1,3-Dichloropropane	ND		ug/kg	1.3	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.33	--	1
Bromobenzene	ND		ug/kg	1.3	--	1
n-Butylbenzene	ND		ug/kg	0.66	--	1
sec-Butylbenzene	ND		ug/kg	0.66	--	1
tert-Butylbenzene	ND		ug/kg	1.3	--	1
o-Chlorotoluene	ND		ug/kg	1.3	--	1
p-Chlorotoluene	ND		ug/kg	1.3	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.0	--	1
Hexachlorobutadiene	ND		ug/kg	2.6	--	1
Isopropylbenzene	ND		ug/kg	0.66	--	1
p-Isopropyltoluene	ND		ug/kg	0.66	--	1
Naphthalene	ND		ug/kg	2.6	--	1
n-Propylbenzene	ND		ug/kg	0.66	--	1

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-02
 Client ID: 50TUFT-B101(1-3)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 08:31
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/kg	1.3	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.3	--	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.3	--	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.3	--	1
Diethyl ether	ND		ug/kg	1.3	--	1
Diisopropyl Ether	ND		ug/kg	1.3	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	1.3	--	1
Tertiary-Amyl Methyl Ether	ND		ug/kg	1.3	--	1
1,4-Dioxane	ND		ug/kg	53	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	90		70-130
4-Bromofluorobenzene	89		70-130
Dibromofluoromethane	94		70-130

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-03
 Client ID: 50TUFT-B101(3-5)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 08:32
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 141,8260D
 Analytical Date: 02/15/24 16:24
 Analyst: MAG
 Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	2.6	--	1
1,1-Dichloroethane	ND		ug/kg	0.51	--	1
Chloroform	ND		ug/kg	0.77	--	1
Carbon tetrachloride	ND		ug/kg	0.51	--	1
1,2-Dichloropropane	ND		ug/kg	0.51	--	1
Dibromochloromethane	ND		ug/kg	0.51	--	1
1,1,2-Trichloroethane	ND		ug/kg	0.51	--	1
Tetrachloroethene	15		ug/kg	0.26	--	1
Chlorobenzene	ND		ug/kg	0.26	--	1
Trichlorofluoromethane	ND		ug/kg	2.0	--	1
1,2-Dichloroethane	ND		ug/kg	0.51	--	1
1,1,1-Trichloroethane	ND		ug/kg	0.26	--	1
Bromodichloromethane	ND		ug/kg	0.26	--	1
trans-1,3-Dichloropropene	ND		ug/kg	0.51	--	1
cis-1,3-Dichloropropene	ND		ug/kg	0.26	--	1
1,3-Dichloropropene, Total	ND		ug/kg	0.26	--	1
1,1-Dichloropropene	ND		ug/kg	0.26	--	1
Bromoform	ND		ug/kg	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.26	--	1
Benzene	ND		ug/kg	0.26	--	1
Toluene	ND		ug/kg	0.51	--	1
Ethylbenzene	ND		ug/kg	0.51	--	1
Chloromethane	ND		ug/kg	2.0	--	1
Bromomethane	ND		ug/kg	1.0	--	1
Vinyl chloride	ND		ug/kg	0.51	--	1
Chloroethane	ND		ug/kg	1.0	--	1
1,1-Dichloroethene	ND		ug/kg	0.51	--	1
trans-1,2-Dichloroethene	ND		ug/kg	0.77	--	1

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-03
 Client ID: 50TUFT-B101(3-5)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 08:32
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.26	--	1
1,2-Dichlorobenzene	ND		ug/kg	1.0	--	1
1,3-Dichlorobenzene	ND		ug/kg	1.0	--	1
1,4-Dichlorobenzene	ND		ug/kg	1.0	--	1
Methyl tert butyl ether	ND		ug/kg	1.0	--	1
p/m-Xylene	ND		ug/kg	1.0	--	1
o-Xylene	ND		ug/kg	0.51	--	1
Xylenes, Total	ND		ug/kg	0.51	--	1
cis-1,2-Dichloroethene	ND		ug/kg	0.51	--	1
1,2-Dichloroethene, Total	ND		ug/kg	0.51	--	1
Dibromomethane	ND		ug/kg	1.0	--	1
1,2,3-Trichloropropane	ND		ug/kg	1.0	--	1
Styrene	ND		ug/kg	0.51	--	1
Dichlorodifluoromethane	ND		ug/kg	5.1	--	1
Acetone	ND		ug/kg	13	--	1
Carbon disulfide	ND		ug/kg	5.1	--	1
Methyl ethyl ketone	ND		ug/kg	5.1	--	1
Methyl isobutyl ketone	ND		ug/kg	5.1	--	1
2-Hexanone	ND		ug/kg	5.1	--	1
Bromochloromethane	ND		ug/kg	1.0	--	1
Tetrahydrofuran	ND		ug/kg	2.0	--	1
2,2-Dichloropropane	ND		ug/kg	1.0	--	1
1,2-Dibromoethane	ND		ug/kg	0.51	--	1
1,3-Dichloropropane	ND		ug/kg	1.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.26	--	1
Bromobenzene	ND		ug/kg	1.0	--	1
n-Butylbenzene	ND		ug/kg	0.51	--	1
sec-Butylbenzene	ND		ug/kg	0.51	--	1
tert-Butylbenzene	ND		ug/kg	1.0	--	1
o-Chlorotoluene	ND		ug/kg	1.0	--	1
p-Chlorotoluene	ND		ug/kg	1.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	1.5	--	1
Hexachlorobutadiene	ND		ug/kg	2.0	--	1
Isopropylbenzene	ND		ug/kg	0.51	--	1
p-Isopropyltoluene	ND		ug/kg	0.51	--	1
Naphthalene	ND		ug/kg	2.0	--	1
n-Propylbenzene	ND		ug/kg	0.51	--	1



Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-03
 Client ID: 50TUFT-B101(3-5)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 08:32
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/kg	1.0	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.0	--	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.0	--	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.0	--	1
Diethyl ether	ND		ug/kg	1.0	--	1
Diisopropyl Ether	ND		ug/kg	1.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	1.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/kg	1.0	--	1
1,4-Dioxane	ND		ug/kg	41	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	92		70-130
Toluene-d8	90		70-130
4-Bromofluorobenzene	91		70-130
Dibromofluoromethane	93		70-130

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-04
 Client ID: 50TUFT-B102(0-1)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 09:00
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 141,8260D
 Analytical Date: 02/15/24 16:54
 Analyst: MAG
 Percent Solids: 94%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	3.2	--	1
1,1-Dichloroethane	ND		ug/kg	0.64	--	1
Chloroform	ND		ug/kg	0.95	--	1
Carbon tetrachloride	ND		ug/kg	0.64	--	1
1,2-Dichloropropane	ND		ug/kg	0.64	--	1
Dibromochloromethane	ND		ug/kg	0.64	--	1
1,1,2-Trichloroethane	ND		ug/kg	0.64	--	1
Tetrachloroethene	0.48		ug/kg	0.32	--	1
Chlorobenzene	ND		ug/kg	0.32	--	1
Trichlorofluoromethane	ND		ug/kg	2.5	--	1
1,2-Dichloroethane	ND		ug/kg	0.64	--	1
1,1,1-Trichloroethane	ND		ug/kg	0.32	--	1
Bromodichloromethane	ND		ug/kg	0.32	--	1
trans-1,3-Dichloropropene	ND		ug/kg	0.64	--	1
cis-1,3-Dichloropropene	ND		ug/kg	0.32	--	1
1,3-Dichloropropene, Total	ND		ug/kg	0.32	--	1
1,1-Dichloropropene	ND		ug/kg	0.32	--	1
Bromoform	ND		ug/kg	2.5	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.32	--	1
Benzene	ND		ug/kg	0.32	--	1
Toluene	ND		ug/kg	0.64	--	1
Ethylbenzene	ND		ug/kg	0.64	--	1
Chloromethane	ND		ug/kg	2.5	--	1
Bromomethane	ND		ug/kg	1.3	--	1
Vinyl chloride	ND		ug/kg	0.64	--	1
Chloroethane	ND		ug/kg	1.3	--	1
1,1-Dichloroethene	ND		ug/kg	0.64	--	1
trans-1,2-Dichloroethene	ND		ug/kg	0.95	--	1

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-04
 Client ID: 50TUFT-B102(0-1)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 09:00
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.32	--	1
1,2-Dichlorobenzene	ND		ug/kg	1.3	--	1
1,3-Dichlorobenzene	ND		ug/kg	1.3	--	1
1,4-Dichlorobenzene	ND		ug/kg	1.3	--	1
Methyl tert butyl ether	ND		ug/kg	1.3	--	1
p/m-Xylene	ND		ug/kg	1.3	--	1
o-Xylene	ND		ug/kg	0.64	--	1
Xylenes, Total	ND		ug/kg	0.64	--	1
cis-1,2-Dichloroethene	ND		ug/kg	0.64	--	1
1,2-Dichloroethene, Total	ND		ug/kg	0.64	--	1
Dibromomethane	ND		ug/kg	1.3	--	1
1,2,3-Trichloropropane	ND		ug/kg	1.3	--	1
Styrene	ND		ug/kg	0.64	--	1
Dichlorodifluoromethane	ND		ug/kg	6.4	--	1
Acetone	ND		ug/kg	16	--	1
Carbon disulfide	ND		ug/kg	6.4	--	1
Methyl ethyl ketone	ND		ug/kg	6.4	--	1
Methyl isobutyl ketone	ND		ug/kg	6.4	--	1
2-Hexanone	ND		ug/kg	6.4	--	1
Bromochloromethane	ND		ug/kg	1.3	--	1
Tetrahydrofuran	ND		ug/kg	2.5	--	1
2,2-Dichloropropane	ND		ug/kg	1.3	--	1
1,2-Dibromoethane	ND		ug/kg	0.64	--	1
1,3-Dichloropropane	ND		ug/kg	1.3	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.32	--	1
Bromobenzene	ND		ug/kg	1.3	--	1
n-Butylbenzene	ND		ug/kg	0.64	--	1
sec-Butylbenzene	ND		ug/kg	0.64	--	1
tert-Butylbenzene	ND		ug/kg	1.3	--	1
o-Chlorotoluene	ND		ug/kg	1.3	--	1
p-Chlorotoluene	ND		ug/kg	1.3	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	1.9	--	1
Hexachlorobutadiene	ND		ug/kg	2.5	--	1
Isopropylbenzene	ND		ug/kg	0.64	--	1
p-Isopropyltoluene	ND		ug/kg	0.64	--	1
Naphthalene	ND		ug/kg	2.5	--	1
n-Propylbenzene	ND		ug/kg	0.64	--	1

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-04
 Client ID: 50TUFT-B102(0-1)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 09:00
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/kg	1.3	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.3	--	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.3	--	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.3	--	1
Diethyl ether	ND		ug/kg	1.3	--	1
Diisopropyl Ether	ND		ug/kg	1.3	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	1.3	--	1
Tertiary-Amyl Methyl Ether	ND		ug/kg	1.3	--	1
1,4-Dioxane	ND		ug/kg	51	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	91		70-130
Toluene-d8	90		70-130
4-Bromofluorobenzene	90		70-130
Dibromofluoromethane	93		70-130

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-05
 Client ID: 50TUFT-B102(1-3)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 09:01
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 141,8260D
 Analytical Date: 02/15/24 17:25
 Analyst: MAG
 Percent Solids: 92%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	2.9	--	1
1,1-Dichloroethane	ND		ug/kg	0.58	--	1
Chloroform	ND		ug/kg	0.88	--	1
Carbon tetrachloride	ND		ug/kg	0.58	--	1
1,2-Dichloropropane	ND		ug/kg	0.58	--	1
Dibromochloromethane	ND		ug/kg	0.58	--	1
1,1,2-Trichloroethane	ND		ug/kg	0.58	--	1
Tetrachloroethene	1.0		ug/kg	0.29	--	1
Chlorobenzene	ND		ug/kg	0.29	--	1
Trichlorofluoromethane	ND		ug/kg	2.3	--	1
1,2-Dichloroethane	ND		ug/kg	0.58	--	1
1,1,1-Trichloroethane	ND		ug/kg	0.29	--	1
Bromodichloromethane	ND		ug/kg	0.29	--	1
trans-1,3-Dichloropropene	ND		ug/kg	0.58	--	1
cis-1,3-Dichloropropene	ND		ug/kg	0.29	--	1
1,3-Dichloropropene, Total	ND		ug/kg	0.29	--	1
1,1-Dichloropropene	ND		ug/kg	0.29	--	1
Bromoform	ND		ug/kg	2.3	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.29	--	1
Benzene	ND		ug/kg	0.29	--	1
Toluene	ND		ug/kg	0.58	--	1
Ethylbenzene	ND		ug/kg	0.58	--	1
Chloromethane	ND		ug/kg	2.3	--	1
Bromomethane	ND		ug/kg	1.2	--	1
Vinyl chloride	ND		ug/kg	0.58	--	1
Chloroethane	ND		ug/kg	1.2	--	1
1,1-Dichloroethene	ND		ug/kg	0.58	--	1
trans-1,2-Dichloroethene	ND		ug/kg	0.88	--	1

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-05
 Client ID: 50TUFT-B102(1-3)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 09:01
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	0.37		ug/kg	0.29	--	1
1,2-Dichlorobenzene	ND		ug/kg	1.2	--	1
1,3-Dichlorobenzene	ND		ug/kg	1.2	--	1
1,4-Dichlorobenzene	ND		ug/kg	1.2	--	1
Methyl tert butyl ether	ND		ug/kg	1.2	--	1
p/m-Xylene	ND		ug/kg	1.2	--	1
o-Xylene	ND		ug/kg	0.58	--	1
Xylenes, Total	ND		ug/kg	0.58	--	1
cis-1,2-Dichloroethene	ND		ug/kg	0.58	--	1
1,2-Dichloroethene, Total	ND		ug/kg	0.58	--	1
Dibromomethane	ND		ug/kg	1.2	--	1
1,2,3-Trichloropropane	ND		ug/kg	1.2	--	1
Styrene	ND		ug/kg	0.58	--	1
Dichlorodifluoromethane	ND		ug/kg	5.8	--	1
Acetone	ND		ug/kg	14	--	1
Carbon disulfide	ND		ug/kg	5.8	--	1
Methyl ethyl ketone	ND		ug/kg	5.8	--	1
Methyl isobutyl ketone	ND		ug/kg	5.8	--	1
2-Hexanone	ND		ug/kg	5.8	--	1
Bromochloromethane	ND		ug/kg	1.2	--	1
Tetrahydrofuran	ND		ug/kg	2.3	--	1
2,2-Dichloropropane	ND		ug/kg	1.2	--	1
1,2-Dibromoethane	ND		ug/kg	0.58	--	1
1,3-Dichloropropane	ND		ug/kg	1.2	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.29	--	1
Bromobenzene	ND		ug/kg	1.2	--	1
n-Butylbenzene	ND		ug/kg	0.58	--	1
sec-Butylbenzene	ND		ug/kg	0.58	--	1
tert-Butylbenzene	ND		ug/kg	1.2	--	1
o-Chlorotoluene	ND		ug/kg	1.2	--	1
p-Chlorotoluene	ND		ug/kg	1.2	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	1.8	--	1
Hexachlorobutadiene	ND		ug/kg	2.3	--	1
Isopropylbenzene	ND		ug/kg	0.58	--	1
p-Isopropyltoluene	ND		ug/kg	0.58	--	1
Naphthalene	ND		ug/kg	2.3	--	1
n-Propylbenzene	ND		ug/kg	0.58	--	1



Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-05
 Client ID: 50TUFT-B102(1-3)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 09:01
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/kg	1.2	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.2	--	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.2	--	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.2	--	1
Diethyl ether	ND		ug/kg	1.2	--	1
Diisopropyl Ether	ND		ug/kg	1.2	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	1.2	--	1
Tertiary-Amyl Methyl Ether	ND		ug/kg	1.2	--	1
1,4-Dioxane	ND		ug/kg	47	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	92		70-130
Toluene-d8	90		70-130
4-Bromofluorobenzene	91		70-130
Dibromofluoromethane	93		70-130

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-06
 Client ID: 50TUFT-B103(0-1)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 09:30
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 141,8260D
 Analytical Date: 02/20/24 14:19
 Analyst: MAG
 Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	230	--	1
1,1-Dichloroethane	ND		ug/kg	46	--	1
Chloroform	ND		ug/kg	68	--	1
Carbon tetrachloride	ND		ug/kg	46	--	1
1,2-Dichloropropane	ND		ug/kg	46	--	1
Dibromochloromethane	ND		ug/kg	46	--	1
1,1,2-Trichloroethane	ND		ug/kg	46	--	1
Tetrachloroethene	92000	E	ug/kg	23	--	1
Chlorobenzene	ND		ug/kg	23	--	1
Trichlorofluoromethane	ND		ug/kg	180	--	1
1,2-Dichloroethane	ND		ug/kg	46	--	1
1,1,1-Trichloroethane	ND		ug/kg	23	--	1
Bromodichloromethane	ND		ug/kg	23	--	1
trans-1,3-Dichloropropene	ND		ug/kg	46	--	1
cis-1,3-Dichloropropene	ND		ug/kg	23	--	1
1,3-Dichloropropene, Total	ND		ug/kg	23	--	1
1,1-Dichloropropene	ND		ug/kg	23	--	1
Bromoform	ND		ug/kg	180	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	23	--	1
Benzene	ND		ug/kg	23	--	1
Toluene	ND		ug/kg	46	--	1
Ethylbenzene	ND		ug/kg	46	--	1
Chloromethane	ND		ug/kg	180	--	1
Bromomethane	ND		ug/kg	91	--	1
Vinyl chloride	ND		ug/kg	46	--	1
Chloroethane	ND		ug/kg	91	--	1
1,1-Dichloroethene	ND		ug/kg	46	--	1
trans-1,2-Dichloroethene	ND		ug/kg	68	--	1

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-06
 Client ID: 50TUFT-B103(0-1)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 09:30
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	240		ug/kg	23	--	1
1,2-Dichlorobenzene	ND		ug/kg	91	--	1
1,3-Dichlorobenzene	ND		ug/kg	91	--	1
1,4-Dichlorobenzene	ND		ug/kg	91	--	1
Methyl tert butyl ether	ND		ug/kg	91	--	1
p/m-Xylene	ND		ug/kg	91	--	1
o-Xylene	ND		ug/kg	46	--	1
Xylenes, Total	ND		ug/kg	46	--	1
cis-1,2-Dichloroethene	94		ug/kg	46	--	1
1,2-Dichloroethene, Total	94		ug/kg	46	--	1
Dibromomethane	ND		ug/kg	91	--	1
1,2,3-Trichloropropane	ND		ug/kg	91	--	1
Styrene	ND		ug/kg	46	--	1
Dichlorodifluoromethane	ND		ug/kg	460	--	1
Acetone	ND		ug/kg	460	--	1
Carbon disulfide	ND		ug/kg	460	--	1
Methyl ethyl ketone	ND		ug/kg	460	--	1
Methyl isobutyl ketone	ND		ug/kg	460	--	1
2-Hexanone	ND		ug/kg	460	--	1
Bromochloromethane	ND		ug/kg	91	--	1
Tetrahydrofuran	ND		ug/kg	180	--	1
2,2-Dichloropropane	ND		ug/kg	91	--	1
1,2-Dibromoethane	ND		ug/kg	46	--	1
1,3-Dichloropropane	ND		ug/kg	91	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	23	--	1
Bromobenzene	ND		ug/kg	91	--	1
n-Butylbenzene	ND		ug/kg	46	--	1
sec-Butylbenzene	ND		ug/kg	46	--	1
tert-Butylbenzene	ND		ug/kg	91	--	1
o-Chlorotoluene	ND		ug/kg	91	--	1
p-Chlorotoluene	ND		ug/kg	91	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	140	--	1
Hexachlorobutadiene	ND		ug/kg	180	--	1
Isopropylbenzene	ND		ug/kg	46	--	1
p-Isopropyltoluene	ND		ug/kg	46	--	1
Naphthalene	ND		ug/kg	180	--	1
n-Propylbenzene	ND		ug/kg	46	--	1

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-06
 Client ID: 50TUFT-B103(0-1)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 09:30
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 High - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/kg	91	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	91	--	1
1,3,5-Trimethylbenzene	ND		ug/kg	91	--	1
1,2,4-Trimethylbenzene	ND		ug/kg	91	--	1
Diethyl ether	ND		ug/kg	91	--	1
Diisopropyl Ether	ND		ug/kg	91	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	91	--	1
Tertiary-Amyl Methyl Ether	ND		ug/kg	91	--	1
1,4-Dioxane	ND		ug/kg	3600	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	85		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	87		70-130
Dibromofluoromethane	91		70-130

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2408101
Report Date: 02/21/24

SAMPLE RESULTS

Lab ID: L2408101-06 D
Client ID: 50TUFT-B103(0-1)
Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 09:30
Date Received: 02/14/24
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 141,8260D
Analytical Date: 02/21/24 12:25
Analyst: AJK
Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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MCP Volatile Organics by EPA 5035 High - Westborough Lab

Tetrachloroethene	100000		ug/kg	230	--	10
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	88		70-130
Toluene-d8	92		70-130
4-Bromofluorobenzene	86		70-130
Dibromofluoromethane	95		70-130

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-07
 Client ID: 50TUFT-B103(1-3)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 09:31
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 141,8260D
 Analytical Date: 02/15/24 20:26
 Analyst: MAG
 Percent Solids: 81%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	310	--	1
1,1-Dichloroethane	ND		ug/kg	61	--	1
Chloroform	ND		ug/kg	92	--	1
Carbon tetrachloride	ND		ug/kg	61	--	1
1,2-Dichloropropane	ND		ug/kg	61	--	1
Dibromochloromethane	ND		ug/kg	61	--	1
1,1,2-Trichloroethane	ND		ug/kg	61	--	1
Tetrachloroethene	2800		ug/kg	31	--	1
Chlorobenzene	ND		ug/kg	31	--	1
Trichlorofluoromethane	ND		ug/kg	240	--	1
1,2-Dichloroethane	ND		ug/kg	61	--	1
1,1,1-Trichloroethane	ND		ug/kg	31	--	1
Bromodichloromethane	ND		ug/kg	31	--	1
trans-1,3-Dichloropropene	ND		ug/kg	61	--	1
cis-1,3-Dichloropropene	ND		ug/kg	31	--	1
1,3-Dichloropropene, Total	ND		ug/kg	31	--	1
1,1-Dichloropropene	ND		ug/kg	31	--	1
Bromoform	ND		ug/kg	240	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	31	--	1
Benzene	ND		ug/kg	31	--	1
Toluene	ND		ug/kg	61	--	1
Ethylbenzene	ND		ug/kg	61	--	1
Chloromethane	ND		ug/kg	240	--	1
Bromomethane	ND		ug/kg	120	--	1
Vinyl chloride	ND		ug/kg	61	--	1
Chloroethane	ND		ug/kg	120	--	1
1,1-Dichloroethene	ND		ug/kg	61	--	1
trans-1,2-Dichloroethene	ND		ug/kg	92	--	1

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-07
 Client ID: 50TUFT-B103(1-3)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 09:31
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	ND		ug/kg	31	--	1
1,2-Dichlorobenzene	ND		ug/kg	120	--	1
1,3-Dichlorobenzene	ND		ug/kg	120	--	1
1,4-Dichlorobenzene	ND		ug/kg	120	--	1
Methyl tert butyl ether	ND		ug/kg	120	--	1
p/m-Xylene	ND		ug/kg	120	--	1
o-Xylene	ND		ug/kg	61	--	1
Xylenes, Total	ND		ug/kg	61	--	1
cis-1,2-Dichloroethene	ND		ug/kg	61	--	1
1,2-Dichloroethene, Total	ND		ug/kg	61	--	1
Dibromomethane	ND		ug/kg	120	--	1
1,2,3-Trichloropropane	ND		ug/kg	120	--	1
Styrene	ND		ug/kg	61	--	1
Dichlorodifluoromethane	ND		ug/kg	610	--	1
Acetone	ND		ug/kg	610	--	1
Carbon disulfide	ND		ug/kg	610	--	1
Methyl ethyl ketone	ND		ug/kg	610	--	1
Methyl isobutyl ketone	ND		ug/kg	610	--	1
2-Hexanone	ND		ug/kg	610	--	1
Bromochloromethane	ND		ug/kg	120	--	1
Tetrahydrofuran	ND		ug/kg	240	--	1
2,2-Dichloropropane	ND		ug/kg	120	--	1
1,2-Dibromoethane	ND		ug/kg	61	--	1
1,3-Dichloropropane	ND		ug/kg	120	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	31	--	1
Bromobenzene	ND		ug/kg	120	--	1
n-Butylbenzene	ND		ug/kg	61	--	1
sec-Butylbenzene	ND		ug/kg	61	--	1
tert-Butylbenzene	ND		ug/kg	120	--	1
o-Chlorotoluene	ND		ug/kg	120	--	1
p-Chlorotoluene	ND		ug/kg	120	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	180	--	1
Hexachlorobutadiene	ND		ug/kg	240	--	1
Isopropylbenzene	ND		ug/kg	61	--	1
p-Isopropyltoluene	ND		ug/kg	61	--	1
Naphthalene	ND		ug/kg	240	--	1
n-Propylbenzene	ND		ug/kg	61	--	1

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-07
 Client ID: 50TUFT-B103(1-3)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 09:31
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 High - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/kg	120	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	120	--	1
1,3,5-Trimethylbenzene	ND		ug/kg	120	--	1
1,2,4-Trimethylbenzene	ND		ug/kg	120	--	1
Diethyl ether	ND		ug/kg	120	--	1
Diisopropyl Ether	ND		ug/kg	120	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	120	--	1
Tertiary-Amyl Methyl Ether	ND		ug/kg	120	--	1
1,4-Dioxane	ND		ug/kg	4900	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
Toluene-d8	91		70-130
4-Bromofluorobenzene	88		70-130
Dibromofluoromethane	94		70-130

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-08
 Client ID: 50TUFT-B103(3-5)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 09:32
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 141,8260D
 Analytical Date: 02/15/24 17:55
 Analyst: MAG
 Percent Solids: 86%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	3.2	--	1
1,1-Dichloroethane	ND		ug/kg	0.63	--	1
Chloroform	ND		ug/kg	0.95	--	1
Carbon tetrachloride	ND		ug/kg	0.63	--	1
1,2-Dichloropropane	ND		ug/kg	0.63	--	1
Dibromochloromethane	ND		ug/kg	0.63	--	1
1,1,2-Trichloroethane	ND		ug/kg	0.63	--	1
Tetrachloroethene	0.52		ug/kg	0.32	--	1
Chlorobenzene	ND		ug/kg	0.32	--	1
Trichlorofluoromethane	ND		ug/kg	2.5	--	1
1,2-Dichloroethane	ND		ug/kg	0.63	--	1
1,1,1-Trichloroethane	ND		ug/kg	0.32	--	1
Bromodichloromethane	ND		ug/kg	0.32	--	1
trans-1,3-Dichloropropene	ND		ug/kg	0.63	--	1
cis-1,3-Dichloropropene	ND		ug/kg	0.32	--	1
1,3-Dichloropropene, Total	ND		ug/kg	0.32	--	1
1,1-Dichloropropene	ND		ug/kg	0.32	--	1
Bromoform	ND		ug/kg	2.5	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.32	--	1
Benzene	ND		ug/kg	0.32	--	1
Toluene	ND		ug/kg	0.63	--	1
Ethylbenzene	ND		ug/kg	0.63	--	1
Chloromethane	ND		ug/kg	2.5	--	1
Bromomethane	ND		ug/kg	1.3	--	1
Vinyl chloride	ND		ug/kg	0.63	--	1
Chloroethane	ND		ug/kg	1.3	--	1
1,1-Dichloroethene	ND		ug/kg	0.63	--	1
trans-1,2-Dichloroethene	ND		ug/kg	0.95	--	1

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-08
 Client ID: 50TUFT-B103(3-5)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 09:32
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.32	--	1
1,2-Dichlorobenzene	ND		ug/kg	1.3	--	1
1,3-Dichlorobenzene	ND		ug/kg	1.3	--	1
1,4-Dichlorobenzene	ND		ug/kg	1.3	--	1
Methyl tert butyl ether	ND		ug/kg	1.3	--	1
p/m-Xylene	ND		ug/kg	1.3	--	1
o-Xylene	ND		ug/kg	0.63	--	1
Xylenes, Total	ND		ug/kg	0.63	--	1
cis-1,2-Dichloroethene	ND		ug/kg	0.63	--	1
1,2-Dichloroethene, Total	ND		ug/kg	0.63	--	1
Dibromomethane	ND		ug/kg	1.3	--	1
1,2,3-Trichloropropane	ND		ug/kg	1.3	--	1
Styrene	ND		ug/kg	0.63	--	1
Dichlorodifluoromethane	ND		ug/kg	6.3	--	1
Acetone	ND		ug/kg	16	--	1
Carbon disulfide	ND		ug/kg	6.3	--	1
Methyl ethyl ketone	ND		ug/kg	6.3	--	1
Methyl isobutyl ketone	ND		ug/kg	6.3	--	1
2-Hexanone	ND		ug/kg	6.3	--	1
Bromochloromethane	ND		ug/kg	1.3	--	1
Tetrahydrofuran	ND		ug/kg	2.5	--	1
2,2-Dichloropropane	ND		ug/kg	1.3	--	1
1,2-Dibromoethane	ND		ug/kg	0.63	--	1
1,3-Dichloropropane	ND		ug/kg	1.3	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.32	--	1
Bromobenzene	ND		ug/kg	1.3	--	1
n-Butylbenzene	ND		ug/kg	0.63	--	1
sec-Butylbenzene	ND		ug/kg	0.63	--	1
tert-Butylbenzene	ND		ug/kg	1.3	--	1
o-Chlorotoluene	ND		ug/kg	1.3	--	1
p-Chlorotoluene	ND		ug/kg	1.3	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	1.9	--	1
Hexachlorobutadiene	ND		ug/kg	2.5	--	1
Isopropylbenzene	ND		ug/kg	0.63	--	1
p-Isopropyltoluene	ND		ug/kg	0.63	--	1
Naphthalene	ND		ug/kg	2.5	--	1
n-Propylbenzene	ND		ug/kg	0.63	--	1

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-08
 Client ID: 50TUFT-B103(3-5)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 09:32
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/kg	1.3	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.3	--	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.3	--	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.3	--	1
Diethyl ether	ND		ug/kg	1.3	--	1
Diisopropyl Ether	ND		ug/kg	1.3	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	1.3	--	1
Tertiary-Amyl Methyl Ether	ND		ug/kg	1.3	--	1
1,4-Dioxane	ND		ug/kg	50	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	91		70-130
4-Bromofluorobenzene	89		70-130
Dibromofluoromethane	95		70-130

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-09
 Client ID: 50TUFT-B104(0-1)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 10:00
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 141,8260D
 Analytical Date: 02/15/24 18:25
 Analyst: MAG
 Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	2.9	--	1
1,1-Dichloroethane	ND		ug/kg	0.57	--	1
Chloroform	ND		ug/kg	0.86	--	1
Carbon tetrachloride	ND		ug/kg	0.57	--	1
1,2-Dichloropropane	ND		ug/kg	0.57	--	1
Dibromochloromethane	ND		ug/kg	0.57	--	1
1,1,2-Trichloroethane	ND		ug/kg	0.57	--	1
Tetrachloroethene	23		ug/kg	0.29	--	1
Chlorobenzene	ND		ug/kg	0.29	--	1
Trichlorofluoromethane	ND		ug/kg	2.3	--	1
1,2-Dichloroethane	ND		ug/kg	0.57	--	1
1,1,1-Trichloroethane	ND		ug/kg	0.29	--	1
Bromodichloromethane	ND		ug/kg	0.29	--	1
trans-1,3-Dichloropropene	ND		ug/kg	0.57	--	1
cis-1,3-Dichloropropene	ND		ug/kg	0.29	--	1
1,3-Dichloropropene, Total	ND		ug/kg	0.29	--	1
1,1-Dichloropropene	ND		ug/kg	0.29	--	1
Bromoform	ND		ug/kg	2.3	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.29	--	1
Benzene	ND		ug/kg	0.29	--	1
Toluene	ND		ug/kg	0.57	--	1
Ethylbenzene	ND		ug/kg	0.57	--	1
Chloromethane	ND		ug/kg	2.3	--	1
Bromomethane	ND		ug/kg	1.1	--	1
Vinyl chloride	ND		ug/kg	0.57	--	1
Chloroethane	ND		ug/kg	1.1	--	1
1,1-Dichloroethene	ND		ug/kg	0.57	--	1
trans-1,2-Dichloroethene	ND		ug/kg	0.86	--	1

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-09
 Client ID: 50TUFT-B104(0-1)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 10:00
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.29	--	1
1,2-Dichlorobenzene	ND		ug/kg	1.1	--	1
1,3-Dichlorobenzene	ND		ug/kg	1.1	--	1
1,4-Dichlorobenzene	ND		ug/kg	1.1	--	1
Methyl tert butyl ether	ND		ug/kg	1.1	--	1
p/m-Xylene	ND		ug/kg	1.1	--	1
o-Xylene	ND		ug/kg	0.57	--	1
Xylenes, Total	ND		ug/kg	0.57	--	1
cis-1,2-Dichloroethene	ND		ug/kg	0.57	--	1
1,2-Dichloroethene, Total	ND		ug/kg	0.57	--	1
Dibromomethane	ND		ug/kg	1.1	--	1
1,2,3-Trichloropropane	ND		ug/kg	1.1	--	1
Styrene	ND		ug/kg	0.57	--	1
Dichlorodifluoromethane	ND		ug/kg	5.7	--	1
Acetone	ND		ug/kg	14	--	1
Carbon disulfide	ND		ug/kg	5.7	--	1
Methyl ethyl ketone	ND		ug/kg	5.7	--	1
Methyl isobutyl ketone	ND		ug/kg	5.7	--	1
2-Hexanone	ND		ug/kg	5.7	--	1
Bromochloromethane	ND		ug/kg	1.1	--	1
Tetrahydrofuran	ND		ug/kg	2.3	--	1
2,2-Dichloropropane	ND		ug/kg	1.1	--	1
1,2-Dibromoethane	ND		ug/kg	0.57	--	1
1,3-Dichloropropane	ND		ug/kg	1.1	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.29	--	1
Bromobenzene	ND		ug/kg	1.1	--	1
n-Butylbenzene	ND		ug/kg	0.57	--	1
sec-Butylbenzene	ND		ug/kg	0.57	--	1
tert-Butylbenzene	ND		ug/kg	1.1	--	1
o-Chlorotoluene	ND		ug/kg	1.1	--	1
p-Chlorotoluene	ND		ug/kg	1.1	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	1.7	--	1
Hexachlorobutadiene	ND		ug/kg	2.3	--	1
Isopropylbenzene	ND		ug/kg	0.57	--	1
p-Isopropyltoluene	ND		ug/kg	0.57	--	1
Naphthalene	ND		ug/kg	2.3	--	1
n-Propylbenzene	ND		ug/kg	0.57	--	1

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-09
 Client ID: 50TUFT-B104(0-1)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 10:00
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/kg	1.1	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.1	--	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.1	--	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.1	--	1
Diethyl ether	ND		ug/kg	1.1	--	1
Diisopropyl Ether	ND		ug/kg	1.1	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	1.1	--	1
Tertiary-Amyl Methyl Ether	ND		ug/kg	1.1	--	1
1,4-Dioxane	ND		ug/kg	46	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	92		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	99		70-130

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-10
 Client ID: 50TUFT-B104(1-3)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 10:01
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 141,8260D
 Analytical Date: 02/15/24 18:56
 Analyst: MAG
 Percent Solids: 80%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	3.3	--	1
1,1-Dichloroethane	ND		ug/kg	0.67	--	1
Chloroform	ND		ug/kg	1.0	--	1
Carbon tetrachloride	ND		ug/kg	0.67	--	1
1,2-Dichloropropane	ND		ug/kg	0.67	--	1
Dibromochloromethane	ND		ug/kg	0.67	--	1
1,1,2-Trichloroethane	ND		ug/kg	0.67	--	1
Tetrachloroethene	15		ug/kg	0.33	--	1
Chlorobenzene	ND		ug/kg	0.33	--	1
Trichlorofluoromethane	ND		ug/kg	2.7	--	1
1,2-Dichloroethane	ND		ug/kg	0.67	--	1
1,1,1-Trichloroethane	ND		ug/kg	0.33	--	1
Bromodichloromethane	ND		ug/kg	0.33	--	1
trans-1,3-Dichloropropene	ND		ug/kg	0.67	--	1
cis-1,3-Dichloropropene	ND		ug/kg	0.33	--	1
1,3-Dichloropropene, Total	ND		ug/kg	0.33	--	1
1,1-Dichloropropene	ND		ug/kg	0.33	--	1
Bromoform	ND		ug/kg	2.7	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.33	--	1
Benzene	ND		ug/kg	0.33	--	1
Toluene	ND		ug/kg	0.67	--	1
Ethylbenzene	ND		ug/kg	0.67	--	1
Chloromethane	ND		ug/kg	2.7	--	1
Bromomethane	ND		ug/kg	1.3	--	1
Vinyl chloride	ND		ug/kg	0.67	--	1
Chloroethane	ND		ug/kg	1.3	--	1
1,1-Dichloroethene	ND		ug/kg	0.67	--	1
trans-1,2-Dichloroethene	ND		ug/kg	1.0	--	1

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-10
 Client ID: 50TUFT-B104(1-3)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 10:01
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.33	--	1
1,2-Dichlorobenzene	ND		ug/kg	1.3	--	1
1,3-Dichlorobenzene	ND		ug/kg	1.3	--	1
1,4-Dichlorobenzene	ND		ug/kg	1.3	--	1
Methyl tert butyl ether	ND		ug/kg	1.3	--	1
p/m-Xylene	ND		ug/kg	1.3	--	1
o-Xylene	ND		ug/kg	0.67	--	1
Xylenes, Total	ND		ug/kg	0.67	--	1
cis-1,2-Dichloroethene	ND		ug/kg	0.67	--	1
1,2-Dichloroethene, Total	ND		ug/kg	0.67	--	1
Dibromomethane	ND		ug/kg	1.3	--	1
1,2,3-Trichloropropane	ND		ug/kg	1.3	--	1
Styrene	ND		ug/kg	0.67	--	1
Dichlorodifluoromethane	ND		ug/kg	6.7	--	1
Acetone	ND		ug/kg	17	--	1
Carbon disulfide	ND		ug/kg	6.7	--	1
Methyl ethyl ketone	ND		ug/kg	6.7	--	1
Methyl isobutyl ketone	ND		ug/kg	6.7	--	1
2-Hexanone	ND		ug/kg	6.7	--	1
Bromochloromethane	ND		ug/kg	1.3	--	1
Tetrahydrofuran	ND		ug/kg	2.7	--	1
2,2-Dichloropropane	ND		ug/kg	1.3	--	1
1,2-Dibromoethane	ND		ug/kg	0.67	--	1
1,3-Dichloropropane	ND		ug/kg	1.3	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.33	--	1
Bromobenzene	ND		ug/kg	1.3	--	1
n-Butylbenzene	ND		ug/kg	0.67	--	1
sec-Butylbenzene	ND		ug/kg	0.67	--	1
tert-Butylbenzene	ND		ug/kg	1.3	--	1
o-Chlorotoluene	ND		ug/kg	1.3	--	1
p-Chlorotoluene	ND		ug/kg	1.3	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.0	--	1
Hexachlorobutadiene	ND		ug/kg	2.7	--	1
Isopropylbenzene	ND		ug/kg	0.67	--	1
p-Isopropyltoluene	ND		ug/kg	0.67	--	1
Naphthalene	ND		ug/kg	2.7	--	1
n-Propylbenzene	ND		ug/kg	0.67	--	1

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-10
 Client ID: 50TUFT-B104(1-3)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 10:01
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/kg	1.3	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.3	--	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.3	--	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.3	--	1
Diethyl ether	ND		ug/kg	1.3	--	1
Diisopropyl Ether	ND		ug/kg	1.3	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	1.3	--	1
Tertiary-Amyl Methyl Ether	ND		ug/kg	1.3	--	1
1,4-Dioxane	ND		ug/kg	53	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	97		70-130

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-11
 Client ID: 50TUFT-B104(3-5)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 10:02
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 141,8260D
 Analytical Date: 02/15/24 19:26
 Analyst: MAG
 Percent Solids: 82%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.4	--	1
1,1-Dichloroethane	ND		ug/kg	0.88	--	1
Chloroform	ND		ug/kg	1.3	--	1
Carbon tetrachloride	ND		ug/kg	0.88	--	1
1,2-Dichloropropane	ND		ug/kg	0.88	--	1
Dibromochloromethane	ND		ug/kg	0.88	--	1
1,1,2-Trichloroethane	ND		ug/kg	0.88	--	1
Tetrachloroethene	2.4		ug/kg	0.44	--	1
Chlorobenzene	ND		ug/kg	0.44	--	1
Trichlorofluoromethane	ND		ug/kg	3.5	--	1
1,2-Dichloroethane	ND		ug/kg	0.88	--	1
1,1,1-Trichloroethane	ND		ug/kg	0.44	--	1
Bromodichloromethane	ND		ug/kg	0.44	--	1
trans-1,3-Dichloropropene	ND		ug/kg	0.88	--	1
cis-1,3-Dichloropropene	ND		ug/kg	0.44	--	1
1,3-Dichloropropene, Total	ND		ug/kg	0.44	--	1
1,1-Dichloropropene	ND		ug/kg	0.44	--	1
Bromoform	ND		ug/kg	3.5	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.44	--	1
Benzene	ND		ug/kg	0.44	--	1
Toluene	ND		ug/kg	0.88	--	1
Ethylbenzene	ND		ug/kg	0.88	--	1
Chloromethane	ND		ug/kg	3.5	--	1
Bromomethane	ND		ug/kg	1.8	--	1
Vinyl chloride	ND		ug/kg	0.88	--	1
Chloroethane	ND		ug/kg	1.8	--	1
1,1-Dichloroethene	ND		ug/kg	0.88	--	1
trans-1,2-Dichloroethene	ND		ug/kg	1.3	--	1

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-11
 Client ID: 50TUFT-B104(3-5)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 10:02
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.44	--	1
1,2-Dichlorobenzene	ND		ug/kg	1.8	--	1
1,3-Dichlorobenzene	ND		ug/kg	1.8	--	1
1,4-Dichlorobenzene	ND		ug/kg	1.8	--	1
Methyl tert butyl ether	ND		ug/kg	1.8	--	1
p/m-Xylene	ND		ug/kg	1.8	--	1
o-Xylene	ND		ug/kg	0.88	--	1
Xylenes, Total	ND		ug/kg	0.88	--	1
cis-1,2-Dichloroethene	ND		ug/kg	0.88	--	1
1,2-Dichloroethene, Total	ND		ug/kg	0.88	--	1
Dibromomethane	ND		ug/kg	1.8	--	1
1,2,3-Trichloropropane	ND		ug/kg	1.8	--	1
Styrene	ND		ug/kg	0.88	--	1
Dichlorodifluoromethane	ND		ug/kg	8.8	--	1
Acetone	ND		ug/kg	22	--	1
Carbon disulfide	ND		ug/kg	8.8	--	1
Methyl ethyl ketone	ND		ug/kg	8.8	--	1
Methyl isobutyl ketone	ND		ug/kg	8.8	--	1
2-Hexanone	ND		ug/kg	8.8	--	1
Bromochloromethane	ND		ug/kg	1.8	--	1
Tetrahydrofuran	ND		ug/kg	3.5	--	1
2,2-Dichloropropane	ND		ug/kg	1.8	--	1
1,2-Dibromoethane	ND		ug/kg	0.88	--	1
1,3-Dichloropropane	ND		ug/kg	1.8	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.44	--	1
Bromobenzene	ND		ug/kg	1.8	--	1
n-Butylbenzene	ND		ug/kg	0.88	--	1
sec-Butylbenzene	ND		ug/kg	0.88	--	1
tert-Butylbenzene	ND		ug/kg	1.8	--	1
o-Chlorotoluene	ND		ug/kg	1.8	--	1
p-Chlorotoluene	ND		ug/kg	1.8	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.6	--	1
Hexachlorobutadiene	ND		ug/kg	3.5	--	1
Isopropylbenzene	ND		ug/kg	0.88	--	1
p-Isopropyltoluene	ND		ug/kg	0.88	--	1
Naphthalene	ND		ug/kg	3.5	--	1
n-Propylbenzene	ND		ug/kg	0.88	--	1



Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-11
 Client ID: 50TUFT-B104(3-5)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 10:02
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/kg	1.8	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.8	--	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.8	--	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.8	--	1
Diethyl ether	ND		ug/kg	1.8	--	1
Diisopropyl Ether	ND		ug/kg	1.8	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	1.8	--	1
Tertiary-Amyl Methyl Ether	ND		ug/kg	1.8	--	1
1,4-Dioxane	ND		ug/kg	70	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
Toluene-d8	90		70-130
4-Bromofluorobenzene	89		70-130
Dibromofluoromethane	95		70-130

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-12
 Client ID: 50TUFT-B105(0-1)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 11:00
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 141,8260D
 Analytical Date: 02/15/24 20:57
 Analyst: MAG
 Percent Solids: 92%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	220	--	1
1,1-Dichloroethane	ND		ug/kg	44	--	1
Chloroform	ND		ug/kg	67	--	1
Carbon tetrachloride	ND		ug/kg	44	--	1
1,2-Dichloropropane	ND		ug/kg	44	--	1
Dibromochloromethane	ND		ug/kg	44	--	1
1,1,2-Trichloroethane	ND		ug/kg	44	--	1
Tetrachloroethene	810		ug/kg	22	--	1
Chlorobenzene	ND		ug/kg	22	--	1
Trichlorofluoromethane	ND		ug/kg	180	--	1
1,2-Dichloroethane	ND		ug/kg	44	--	1
1,1,1-Trichloroethane	ND		ug/kg	22	--	1
Bromodichloromethane	ND		ug/kg	22	--	1
trans-1,3-Dichloropropene	ND		ug/kg	44	--	1
cis-1,3-Dichloropropene	ND		ug/kg	22	--	1
1,3-Dichloropropene, Total	ND		ug/kg	22	--	1
1,1-Dichloropropene	ND		ug/kg	22	--	1
Bromoform	ND		ug/kg	180	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	22	--	1
Benzene	ND		ug/kg	22	--	1
Toluene	53		ug/kg	44	--	1
Ethylbenzene	ND		ug/kg	44	--	1
Chloromethane	ND		ug/kg	180	--	1
Bromomethane	ND		ug/kg	89	--	1
Vinyl chloride	ND		ug/kg	44	--	1
Chloroethane	ND		ug/kg	89	--	1
1,1-Dichloroethene	ND		ug/kg	44	--	1
trans-1,2-Dichloroethene	ND		ug/kg	67	--	1

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-12
 Client ID: 50TUFT-B105(0-1)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 11:00
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	ND		ug/kg	22	--	1
1,2-Dichlorobenzene	ND		ug/kg	89	--	1
1,3-Dichlorobenzene	ND		ug/kg	89	--	1
1,4-Dichlorobenzene	ND		ug/kg	89	--	1
Methyl tert butyl ether	ND		ug/kg	89	--	1
p/m-Xylene	ND		ug/kg	89	--	1
o-Xylene	ND		ug/kg	44	--	1
Xylenes, Total	ND		ug/kg	44	--	1
cis-1,2-Dichloroethene	ND		ug/kg	44	--	1
1,2-Dichloroethene, Total	ND		ug/kg	44	--	1
Dibromomethane	ND		ug/kg	89	--	1
1,2,3-Trichloropropane	ND		ug/kg	89	--	1
Styrene	ND		ug/kg	44	--	1
Dichlorodifluoromethane	ND		ug/kg	440	--	1
Acetone	ND		ug/kg	440	--	1
Carbon disulfide	ND		ug/kg	440	--	1
Methyl ethyl ketone	ND		ug/kg	440	--	1
Methyl isobutyl ketone	ND		ug/kg	440	--	1
2-Hexanone	ND		ug/kg	440	--	1
Bromochloromethane	ND		ug/kg	89	--	1
Tetrahydrofuran	ND		ug/kg	180	--	1
2,2-Dichloropropane	ND		ug/kg	89	--	1
1,2-Dibromoethane	ND		ug/kg	44	--	1
1,3-Dichloropropane	ND		ug/kg	89	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	22	--	1
Bromobenzene	ND		ug/kg	89	--	1
n-Butylbenzene	ND		ug/kg	44	--	1
sec-Butylbenzene	ND		ug/kg	44	--	1
tert-Butylbenzene	ND		ug/kg	89	--	1
o-Chlorotoluene	ND		ug/kg	89	--	1
p-Chlorotoluene	ND		ug/kg	89	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	130	--	1
Hexachlorobutadiene	ND		ug/kg	180	--	1
Isopropylbenzene	ND		ug/kg	44	--	1
p-Isopropyltoluene	ND		ug/kg	44	--	1
Naphthalene	ND		ug/kg	180	--	1
n-Propylbenzene	ND		ug/kg	44	--	1

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2408101
Report Date: 02/21/24

SAMPLE RESULTS

Lab ID: L2408101-12
Client ID: 50TUFT-B105(0-1)
Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 11:00
Date Received: 02/14/24
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 High - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/kg	89	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	89	--	1
1,3,5-Trimethylbenzene	ND		ug/kg	89	--	1
1,2,4-Trimethylbenzene	ND		ug/kg	89	--	1
Diethyl ether	ND		ug/kg	89	--	1
Diisopropyl Ether	ND		ug/kg	89	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	89	--	1
Tertiary-Amyl Methyl Ether	ND		ug/kg	89	--	1
1,4-Dioxane	ND		ug/kg	3600	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
Toluene-d8	90		70-130
4-Bromofluorobenzene	87		70-130
Dibromofluoromethane	94		70-130

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-13
 Client ID: 50TUFT-B105(1-3)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 11:01
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 141,8260D
 Analytical Date: 02/15/24 19:56
 Analyst: MAG
 Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	6.1	--	1
1,1-Dichloroethane	ND		ug/kg	1.2	--	1
Chloroform	ND		ug/kg	1.8	--	1
Carbon tetrachloride	ND		ug/kg	1.2	--	1
1,2-Dichloropropane	ND		ug/kg	1.2	--	1
Dibromochloromethane	ND		ug/kg	1.2	--	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	--	1
Tetrachloroethene	10		ug/kg	0.61	--	1
Chlorobenzene	ND		ug/kg	0.61	--	1
Trichlorofluoromethane	ND		ug/kg	4.8	--	1
1,2-Dichloroethane	ND		ug/kg	1.2	--	1
1,1,1-Trichloroethane	ND		ug/kg	0.61	--	1
Bromodichloromethane	ND		ug/kg	0.61	--	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	--	1
cis-1,3-Dichloropropene	ND		ug/kg	0.61	--	1
1,3-Dichloropropene, Total	ND		ug/kg	0.61	--	1
1,1-Dichloropropene	ND		ug/kg	0.61	--	1
Bromoform	ND		ug/kg	4.8	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.61	--	1
Benzene	ND		ug/kg	0.61	--	1
Toluene	ND		ug/kg	1.2	--	1
Ethylbenzene	ND		ug/kg	1.2	--	1
Chloromethane	ND		ug/kg	4.8	--	1
Bromomethane	ND		ug/kg	2.4	--	1
Vinyl chloride	ND		ug/kg	1.2	--	1
Chloroethane	ND		ug/kg	2.4	--	1
1,1-Dichloroethene	ND		ug/kg	1.2	--	1
trans-1,2-Dichloroethene	ND		ug/kg	1.8	--	1

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-13
 Client ID: 50TUFT-B105(1-3)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 11:01
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.61	--	1
1,2-Dichlorobenzene	ND		ug/kg	2.4	--	1
1,3-Dichlorobenzene	ND		ug/kg	2.4	--	1
1,4-Dichlorobenzene	ND		ug/kg	2.4	--	1
Methyl tert butyl ether	ND		ug/kg	2.4	--	1
p/m-Xylene	ND		ug/kg	2.4	--	1
o-Xylene	ND		ug/kg	1.2	--	1
Xylenes, Total	ND		ug/kg	1.2	--	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	--	1
1,2-Dichloroethene, Total	ND		ug/kg	1.2	--	1
Dibromomethane	ND		ug/kg	2.4	--	1
1,2,3-Trichloropropane	ND		ug/kg	2.4	--	1
Styrene	ND		ug/kg	1.2	--	1
Dichlorodifluoromethane	ND		ug/kg	12	--	1
Acetone	ND		ug/kg	30	--	1
Carbon disulfide	ND		ug/kg	12	--	1
Methyl ethyl ketone	ND		ug/kg	12	--	1
Methyl isobutyl ketone	ND		ug/kg	12	--	1
2-Hexanone	ND		ug/kg	12	--	1
Bromochloromethane	ND		ug/kg	2.4	--	1
Tetrahydrofuran	ND		ug/kg	4.8	--	1
2,2-Dichloropropane	ND		ug/kg	2.4	--	1
1,2-Dibromoethane	ND		ug/kg	1.2	--	1
1,3-Dichloropropane	ND		ug/kg	2.4	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.61	--	1
Bromobenzene	ND		ug/kg	2.4	--	1
n-Butylbenzene	ND		ug/kg	1.2	--	1
sec-Butylbenzene	ND		ug/kg	1.2	--	1
tert-Butylbenzene	ND		ug/kg	2.4	--	1
o-Chlorotoluene	ND		ug/kg	2.4	--	1
p-Chlorotoluene	ND		ug/kg	2.4	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.6	--	1
Hexachlorobutadiene	ND		ug/kg	4.8	--	1
Isopropylbenzene	ND		ug/kg	1.2	--	1
p-Isopropyltoluene	ND		ug/kg	1.2	--	1
Naphthalene	ND		ug/kg	4.8	--	1
n-Propylbenzene	ND		ug/kg	1.2	--	1

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-13
 Client ID: 50TUFT-B105(1-3)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 11:01
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/kg	2.4	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.4	--	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.4	--	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.4	--	1
Diethyl ether	ND		ug/kg	2.4	--	1
Diisopropyl Ether	ND		ug/kg	2.4	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	2.4	--	1
Tertiary-Amyl Methyl Ether	ND		ug/kg	2.4	--	1
1,4-Dioxane	ND		ug/kg	97	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	90		70-130
4-Bromofluorobenzene	88		70-130
Dibromofluoromethane	96		70-130

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2408101
Report Date: 02/21/24

Method Blank Analysis Batch Quality Control

Analytical Method: 141,8260D
 Analytical Date: 02/15/24 13:52
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 07,12 Batch: WG1886042-5					
Methylene chloride	ND		ug/kg	250	--
1,1-Dichloroethane	ND		ug/kg	50	--
Chloroform	ND		ug/kg	75	--
Carbon tetrachloride	ND		ug/kg	50	--
1,2-Dichloropropane	ND		ug/kg	50	--
Dibromochloromethane	ND		ug/kg	50	--
1,1,2-Trichloroethane	ND		ug/kg	50	--
Tetrachloroethene	ND		ug/kg	25	--
Chlorobenzene	ND		ug/kg	25	--
Trichlorofluoromethane	ND		ug/kg	200	--
1,2-Dichloroethane	ND		ug/kg	50	--
1,1,1-Trichloroethane	ND		ug/kg	25	--
Bromodichloromethane	ND		ug/kg	25	--
trans-1,3-Dichloropropene	ND		ug/kg	50	--
cis-1,3-Dichloropropene	ND		ug/kg	25	--
1,3-Dichloropropene, Total	ND		ug/kg	25	--
1,1-Dichloropropene	ND		ug/kg	25	--
Bromoform	ND		ug/kg	200	--
1,1,2,2-Tetrachloroethane	ND		ug/kg	25	--
Benzene	ND		ug/kg	25	--
Toluene	ND		ug/kg	50	--
Ethylbenzene	ND		ug/kg	50	--
Chloromethane	ND		ug/kg	200	--
Bromomethane	ND		ug/kg	100	--
Vinyl chloride	ND		ug/kg	50	--
Chloroethane	ND		ug/kg	100	--
1,1-Dichloroethene	ND		ug/kg	50	--
trans-1,2-Dichloroethene	ND		ug/kg	75	--
Trichloroethene	ND		ug/kg	25	--

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2408101
Report Date: 02/21/24

Method Blank Analysis Batch Quality Control

Analytical Method: 141,8260D
 Analytical Date: 02/15/24 13:52
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 07,12 Batch: WG1886042-5					
1,2-Dichlorobenzene	ND		ug/kg	100	--
1,3-Dichlorobenzene	ND		ug/kg	100	--
1,4-Dichlorobenzene	ND		ug/kg	100	--
Methyl tert butyl ether	ND		ug/kg	100	--
p/m-Xylene	ND		ug/kg	100	--
o-Xylene	ND		ug/kg	50	--
Xylenes, Total	ND		ug/kg	50	--
cis-1,2-Dichloroethene	ND		ug/kg	50	--
1,2-Dichloroethene, Total	ND		ug/kg	50	--
Dibromomethane	ND		ug/kg	100	--
1,2,3-Trichloropropane	ND		ug/kg	100	--
Styrene	ND		ug/kg	50	--
Dichlorodifluoromethane	ND		ug/kg	500	--
Acetone	ND		ug/kg	500	--
Carbon disulfide	ND		ug/kg	500	--
Methyl ethyl ketone	ND		ug/kg	500	--
Methyl isobutyl ketone	ND		ug/kg	500	--
2-Hexanone	ND		ug/kg	500	--
Bromochloromethane	ND		ug/kg	100	--
Tetrahydrofuran	ND		ug/kg	200	--
2,2-Dichloropropane	ND		ug/kg	100	--
1,2-Dibromoethane	ND		ug/kg	50	--
1,3-Dichloropropane	ND		ug/kg	100	--
1,1,1,2-Tetrachloroethane	ND		ug/kg	25	--
Bromobenzene	ND		ug/kg	100	--
n-Butylbenzene	ND		ug/kg	50	--
sec-Butylbenzene	ND		ug/kg	50	--
tert-Butylbenzene	ND		ug/kg	100	--
o-Chlorotoluene	ND		ug/kg	100	--

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2408101
Report Date: 02/21/24

Method Blank Analysis Batch Quality Control

Analytical Method: 141,8260D
Analytical Date: 02/15/24 13:52
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 07,12 Batch: WG1886042-5					
p-Chlorotoluene	ND		ug/kg	100	--
1,2-Dibromo-3-chloropropane	ND		ug/kg	150	--
Hexachlorobutadiene	ND		ug/kg	200	--
Isopropylbenzene	ND		ug/kg	50	--
p-Isopropyltoluene	ND		ug/kg	50	--
Naphthalene	ND		ug/kg	200	--
n-Propylbenzene	ND		ug/kg	50	--
1,2,3-Trichlorobenzene	ND		ug/kg	100	--
1,2,4-Trichlorobenzene	ND		ug/kg	100	--
1,3,5-Trimethylbenzene	ND		ug/kg	100	--
1,2,4-Trimethylbenzene	ND		ug/kg	100	--
Diethyl ether	ND		ug/kg	100	--
Diisopropyl Ether	ND		ug/kg	100	--
Ethyl-Tert-Butyl-Ether	ND		ug/kg	100	--
Tertiary-Amyl Methyl Ether	ND		ug/kg	100	--
1,4-Dioxane	ND		ug/kg	4000	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	90		70-130
Toluene-d8	91		70-130
4-Bromofluorobenzene	91		70-130
Dibromofluoromethane	92		70-130

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2408101
Report Date: 02/21/24

Method Blank Analysis Batch Quality Control

Analytical Method: 141,8260D
 Analytical Date: 02/15/24 13:52
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-05,08-11,13 Batch: WG1886062-5					
Methylene chloride	ND		ug/kg	5.0	--
1,1-Dichloroethane	ND		ug/kg	1.0	--
Chloroform	ND		ug/kg	1.5	--
Carbon tetrachloride	ND		ug/kg	1.0	--
1,2-Dichloropropane	ND		ug/kg	1.0	--
Dibromochloromethane	ND		ug/kg	1.0	--
1,1,2-Trichloroethane	ND		ug/kg	1.0	--
Tetrachloroethene	ND		ug/kg	0.50	--
Chlorobenzene	ND		ug/kg	0.50	--
Trichlorofluoromethane	ND		ug/kg	4.0	--
1,2-Dichloroethane	ND		ug/kg	1.0	--
1,1,1-Trichloroethane	ND		ug/kg	0.50	--
Bromodichloromethane	ND		ug/kg	0.50	--
trans-1,3-Dichloropropene	ND		ug/kg	1.0	--
cis-1,3-Dichloropropene	ND		ug/kg	0.50	--
1,3-Dichloropropene, Total	ND		ug/kg	0.50	--
1,1-Dichloropropene	ND		ug/kg	0.50	--
Bromoform	ND		ug/kg	4.0	--
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	--
Benzene	ND		ug/kg	0.50	--
Toluene	ND		ug/kg	1.0	--
Ethylbenzene	ND		ug/kg	1.0	--
Chloromethane	ND		ug/kg	4.0	--
Bromomethane	ND		ug/kg	2.0	--
Vinyl chloride	ND		ug/kg	1.0	--
Chloroethane	ND		ug/kg	2.0	--
1,1-Dichloroethene	ND		ug/kg	1.0	--
trans-1,2-Dichloroethene	ND		ug/kg	1.5	--
Trichloroethene	ND		ug/kg	0.50	--

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2408101
Report Date: 02/21/24

Method Blank Analysis Batch Quality Control

Analytical Method: 141,8260D
 Analytical Date: 02/15/24 13:52
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-05,08-11,13 Batch: WG1886062-5					
1,2-Dichlorobenzene	ND		ug/kg	2.0	--
1,3-Dichlorobenzene	ND		ug/kg	2.0	--
1,4-Dichlorobenzene	ND		ug/kg	2.0	--
Methyl tert butyl ether	ND		ug/kg	2.0	--
p/m-Xylene	ND		ug/kg	2.0	--
o-Xylene	ND		ug/kg	1.0	--
Xylenes, Total	ND		ug/kg	1.0	--
cis-1,2-Dichloroethene	ND		ug/kg	1.0	--
1,2-Dichloroethene, Total	ND		ug/kg	1.0	--
Dibromomethane	ND		ug/kg	2.0	--
1,2,3-Trichloropropane	ND		ug/kg	2.0	--
Styrene	ND		ug/kg	1.0	--
Dichlorodifluoromethane	ND		ug/kg	10	--
Acetone	ND		ug/kg	25	--
Carbon disulfide	ND		ug/kg	10	--
Methyl ethyl ketone	ND		ug/kg	10	--
Methyl isobutyl ketone	ND		ug/kg	10	--
2-Hexanone	ND		ug/kg	10	--
Bromochloromethane	ND		ug/kg	2.0	--
Tetrahydrofuran	ND		ug/kg	4.0	--
2,2-Dichloropropane	ND		ug/kg	2.0	--
1,2-Dibromoethane	ND		ug/kg	1.0	--
1,3-Dichloropropane	ND		ug/kg	2.0	--
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	--
Bromobenzene	ND		ug/kg	2.0	--
n-Butylbenzene	ND		ug/kg	1.0	--
sec-Butylbenzene	ND		ug/kg	1.0	--
tert-Butylbenzene	ND		ug/kg	2.0	--
o-Chlorotoluene	ND		ug/kg	2.0	--

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2408101
Report Date: 02/21/24

Method Blank Analysis Batch Quality Control

Analytical Method: 141,8260D
Analytical Date: 02/15/24 13:52
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-05,08-11,13 Batch: WG1886062-5					
p-Chlorotoluene	ND		ug/kg	2.0	--
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	--
Hexachlorobutadiene	ND		ug/kg	4.0	--
Isopropylbenzene	ND		ug/kg	1.0	--
p-Isopropyltoluene	ND		ug/kg	1.0	--
Naphthalene	ND		ug/kg	4.0	--
n-Propylbenzene	ND		ug/kg	1.0	--
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	--
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	--
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	--
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	--
Diethyl ether	ND		ug/kg	2.0	--
Diisopropyl Ether	ND		ug/kg	2.0	--
Ethyl-Tert-Butyl-Ether	ND		ug/kg	2.0	--
Tertiary-Amyl Methyl Ether	ND		ug/kg	2.0	--
1,4-Dioxane	ND		ug/kg	80	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	90		70-130
Toluene-d8	91		70-130
4-Bromofluorobenzene	91		70-130
Dibromofluoromethane	92		70-130



Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2408101
Report Date: 02/21/24

Method Blank Analysis Batch Quality Control

Analytical Method: 141,8260D
 Analytical Date: 02/20/24 10:26
 Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 06 Batch: WG1887347-5					
Methylene chloride	ND		ug/kg	250	--
1,1-Dichloroethane	ND		ug/kg	50	--
Chloroform	76		ug/kg	75	--
Carbon tetrachloride	ND		ug/kg	50	--
1,2-Dichloropropane	ND		ug/kg	50	--
Dibromochloromethane	ND		ug/kg	50	--
1,1,2-Trichloroethane	ND		ug/kg	50	--
Tetrachloroethene	ND		ug/kg	25	--
Chlorobenzene	ND		ug/kg	25	--
Trichlorofluoromethane	ND		ug/kg	200	--
1,2-Dichloroethane	ND		ug/kg	50	--
1,1,1-Trichloroethane	ND		ug/kg	25	--
Bromodichloromethane	ND		ug/kg	25	--
trans-1,3-Dichloropropene	ND		ug/kg	50	--
cis-1,3-Dichloropropene	ND		ug/kg	25	--
1,3-Dichloropropene, Total	ND		ug/kg	25	--
1,1-Dichloropropene	ND		ug/kg	25	--
Bromoform	ND		ug/kg	200	--
1,1,2,2-Tetrachloroethane	ND		ug/kg	25	--
Benzene	ND		ug/kg	25	--
Toluene	ND		ug/kg	50	--
Ethylbenzene	ND		ug/kg	50	--
Chloromethane	ND		ug/kg	200	--
Bromomethane	ND		ug/kg	100	--
Vinyl chloride	ND		ug/kg	50	--
Chloroethane	ND		ug/kg	100	--
1,1-Dichloroethene	ND		ug/kg	50	--
trans-1,2-Dichloroethene	ND		ug/kg	75	--
Trichloroethene	ND		ug/kg	25	--

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2408101
Report Date: 02/21/24

Method Blank Analysis Batch Quality Control

Analytical Method: 141,8260D
 Analytical Date: 02/20/24 10:26
 Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 06 Batch: WG1887347-5					
1,2-Dichlorobenzene	ND		ug/kg	100	--
1,3-Dichlorobenzene	ND		ug/kg	100	--
1,4-Dichlorobenzene	ND		ug/kg	100	--
Methyl tert butyl ether	ND		ug/kg	100	--
p/m-Xylene	ND		ug/kg	100	--
o-Xylene	ND		ug/kg	50	--
Xylenes, Total	ND		ug/kg	50	--
cis-1,2-Dichloroethene	ND		ug/kg	50	--
1,2-Dichloroethene, Total	ND		ug/kg	50	--
Dibromomethane	ND		ug/kg	100	--
1,2,3-Trichloropropane	ND		ug/kg	100	--
Styrene	ND		ug/kg	50	--
Dichlorodifluoromethane	ND		ug/kg	500	--
Acetone	ND		ug/kg	500	--
Carbon disulfide	ND		ug/kg	500	--
Methyl ethyl ketone	ND		ug/kg	500	--
Methyl isobutyl ketone	ND		ug/kg	500	--
2-Hexanone	ND		ug/kg	500	--
Bromochloromethane	ND		ug/kg	100	--
Tetrahydrofuran	ND		ug/kg	200	--
2,2-Dichloropropane	ND		ug/kg	100	--
1,2-Dibromoethane	ND		ug/kg	50	--
1,3-Dichloropropane	ND		ug/kg	100	--
1,1,1,2-Tetrachloroethane	ND		ug/kg	25	--
Bromobenzene	ND		ug/kg	100	--
n-Butylbenzene	ND		ug/kg	50	--
sec-Butylbenzene	ND		ug/kg	50	--
tert-Butylbenzene	ND		ug/kg	100	--
o-Chlorotoluene	ND		ug/kg	100	--

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2408101
Report Date: 02/21/24

Method Blank Analysis Batch Quality Control

Analytical Method: 141,8260D
Analytical Date: 02/20/24 10:26
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 06 Batch: WG1887347-5					
p-Chlorotoluene	ND		ug/kg	100	--
1,2-Dibromo-3-chloropropane	ND		ug/kg	150	--
Hexachlorobutadiene	ND		ug/kg	200	--
Isopropylbenzene	ND		ug/kg	50	--
p-Isopropyltoluene	ND		ug/kg	50	--
Naphthalene	ND		ug/kg	200	--
n-Propylbenzene	ND		ug/kg	50	--
1,2,3-Trichlorobenzene	ND		ug/kg	100	--
1,2,4-Trichlorobenzene	ND		ug/kg	100	--
1,3,5-Trimethylbenzene	ND		ug/kg	100	--
1,2,4-Trimethylbenzene	ND		ug/kg	100	--
Diethyl ether	ND		ug/kg	100	--
Diisopropyl Ether	ND		ug/kg	100	--
Ethyl-Tert-Butyl-Ether	ND		ug/kg	100	--
Tertiary-Amyl Methyl Ether	ND		ug/kg	100	--
1,4-Dioxane	ND		ug/kg	4000	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	86		70-130
Toluene-d8	92		70-130
4-Bromofluorobenzene	87		70-130
Dibromofluoromethane	94		70-130

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2408101
Report Date: 02/21/24

Method Blank Analysis Batch Quality Control

Analytical Method: 141,8260D
 Analytical Date: 02/21/24 09:56
 Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 06 Batch: WG1887734-5					
Methylene chloride	ND		ug/kg	250	--
1,1-Dichloroethane	ND		ug/kg	50	--
Chloroform	ND		ug/kg	75	--
Carbon tetrachloride	ND		ug/kg	50	--
1,2-Dichloropropane	ND		ug/kg	50	--
Dibromochloromethane	ND		ug/kg	50	--
1,1,2-Trichloroethane	ND		ug/kg	50	--
Tetrachloroethene	ND		ug/kg	25	--
Chlorobenzene	ND		ug/kg	25	--
Trichlorofluoromethane	ND		ug/kg	200	--
1,2-Dichloroethane	ND		ug/kg	50	--
1,1,1-Trichloroethane	ND		ug/kg	25	--
Bromodichloromethane	ND		ug/kg	25	--
trans-1,3-Dichloropropene	ND		ug/kg	50	--
cis-1,3-Dichloropropene	ND		ug/kg	25	--
1,3-Dichloropropene, Total	ND		ug/kg	25	--
1,1-Dichloropropene	ND		ug/kg	25	--
Bromoform	ND		ug/kg	200	--
1,1,2,2-Tetrachloroethane	ND		ug/kg	25	--
Benzene	ND		ug/kg	25	--
Toluene	ND		ug/kg	50	--
Ethylbenzene	ND		ug/kg	50	--
Chloromethane	ND		ug/kg	200	--
Bromomethane	ND		ug/kg	100	--
Vinyl chloride	ND		ug/kg	50	--
Chloroethane	ND		ug/kg	100	--
1,1-Dichloroethene	ND		ug/kg	50	--
trans-1,2-Dichloroethene	ND		ug/kg	75	--
Trichloroethene	ND		ug/kg	25	--

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2408101
Report Date: 02/21/24

Method Blank Analysis Batch Quality Control

Analytical Method: 141,8260D
 Analytical Date: 02/21/24 09:56
 Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 06 Batch: WG1887734-5					
1,2-Dichlorobenzene	ND		ug/kg	100	--
1,3-Dichlorobenzene	ND		ug/kg	100	--
1,4-Dichlorobenzene	ND		ug/kg	100	--
Methyl tert butyl ether	ND		ug/kg	100	--
p/m-Xylene	ND		ug/kg	100	--
o-Xylene	ND		ug/kg	50	--
Xylenes, Total	ND		ug/kg	50	--
cis-1,2-Dichloroethene	ND		ug/kg	50	--
1,2-Dichloroethene, Total	ND		ug/kg	50	--
Dibromomethane	ND		ug/kg	100	--
1,2,3-Trichloropropane	ND		ug/kg	100	--
Styrene	ND		ug/kg	50	--
Dichlorodifluoromethane	ND		ug/kg	500	--
Acetone	ND		ug/kg	500	--
Carbon disulfide	ND		ug/kg	500	--
Methyl ethyl ketone	ND		ug/kg	500	--
Methyl isobutyl ketone	ND		ug/kg	500	--
2-Hexanone	ND		ug/kg	500	--
Bromochloromethane	ND		ug/kg	100	--
Tetrahydrofuran	ND		ug/kg	200	--
2,2-Dichloropropane	ND		ug/kg	100	--
1,2-Dibromoethane	ND		ug/kg	50	--
1,3-Dichloropropane	ND		ug/kg	100	--
1,1,1,2-Tetrachloroethane	ND		ug/kg	25	--
Bromobenzene	ND		ug/kg	100	--
n-Butylbenzene	ND		ug/kg	50	--
sec-Butylbenzene	ND		ug/kg	50	--
tert-Butylbenzene	ND		ug/kg	100	--
o-Chlorotoluene	ND		ug/kg	100	--

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2408101
Report Date: 02/21/24

Method Blank Analysis Batch Quality Control

Analytical Method: 141,8260D
 Analytical Date: 02/21/24 09:56
 Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 06 Batch: WG1887734-5					
p-Chlorotoluene	ND		ug/kg	100	--
1,2-Dibromo-3-chloropropane	ND		ug/kg	150	--
Hexachlorobutadiene	ND		ug/kg	200	--
Isopropylbenzene	ND		ug/kg	50	--
p-Isopropyltoluene	ND		ug/kg	50	--
Naphthalene	ND		ug/kg	200	--
n-Propylbenzene	ND		ug/kg	50	--
1,2,3-Trichlorobenzene	ND		ug/kg	100	--
1,2,4-Trichlorobenzene	ND		ug/kg	100	--
1,3,5-Trimethylbenzene	ND		ug/kg	100	--
1,2,4-Trimethylbenzene	ND		ug/kg	100	--
Diethyl ether	ND		ug/kg	100	--
Diisopropyl Ether	ND		ug/kg	100	--
Ethyl-Tert-Butyl-Ether	ND		ug/kg	100	--
Tertiary-Amyl Methyl Ether	ND		ug/kg	100	--
1,4-Dioxane	ND		ug/kg	4000	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	85		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	86		70-130
Dibromofluoromethane	94		70-130

Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2408101

Report Date: 02/21/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 07,12 Batch: WG1886042-3 WG1886042-4								
Methylene chloride	77		78		70-130	1		20
1,1-Dichloroethane	81		81		70-130	0		20
Chloroform	84		84		70-130	0		20
Carbon tetrachloride	73		73		70-130	0		20
1,2-Dichloropropane	85		85		70-130	0		20
Dibromochloromethane	90		90		70-130	0		20
1,1,2-Trichloroethane	86		86		70-130	0		20
Tetrachloroethene	91		90		70-130	1		20
Chlorobenzene	86		85		70-130	1		20
Trichlorofluoromethane	73		72		70-130	1		20
1,2-Dichloroethane	84		84		70-130	0		20
1,1,1-Trichloroethane	86		85		70-130	1		20
Bromodichloromethane	87		86		70-130	1		20
trans-1,3-Dichloropropene	92		92		70-130	0		20
cis-1,3-Dichloropropene	92		92		70-130	0		20
1,1-Dichloropropene	88		88		70-130	0		20
Bromoform	89		87		70-130	2		20
1,1,2,2-Tetrachloroethane	83		82		70-130	1		20
Benzene	84		84		70-130	0		20
Toluene	84		84		70-130	0		20
Ethylbenzene	86		86		70-130	0		20
Chloromethane	67	Q	67	Q	70-130	0		20
Bromomethane	73		73		70-130	0		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2408101

Report Date: 02/21/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 07,12 Batch: WG1886042-3 WG1886042-4								
Vinyl chloride	72		72		70-130	0		20
Chloroethane	78		78		70-130	0		20
1,1-Dichloroethene	68	Q	68	Q	70-130	0		20
trans-1,2-Dichloroethene	80		80		70-130	0		20
Trichloroethene	86		86		70-130	0		20
1,2-Dichlorobenzene	88		87		70-130	1		20
1,3-Dichlorobenzene	88		87		70-130	1		20
1,4-Dichlorobenzene	87		86		70-130	1		20
Methyl tert butyl ether	86		86		70-130	0		20
p/m-Xylene	88		88		70-130	0		20
o-Xylene	88		88		70-130	0		20
cis-1,2-Dichloroethene	84		83		70-130	1		20
Dibromomethane	86		84		70-130	2		20
1,2,3-Trichloropropane	82		81		70-130	1		20
Styrene	90		90		70-130	0		20
Dichlorodifluoromethane	62	Q	62	Q	70-130	0		20
Acetone	64	Q	64	Q	70-130	0		20
Carbon disulfide	68	Q	68	Q	70-130	0		20
Methyl ethyl ketone	71		71		70-130	0		20
Methyl isobutyl ketone	85		85		70-130	0		20
2-Hexanone	78		76		70-130	3		20
Bromochloromethane	87		86		70-130	1		20
Tetrahydrofuran	65	Q	64	Q	70-130	2		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2408101

Report Date: 02/21/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 07,12 Batch: WG1886042-3 WG1886042-4								
2,2-Dichloropropane	87		86		70-130	1		20
1,2-Dibromoethane	88		87		70-130	1		20
1,3-Dichloropropane	86		85		70-130	1		20
1,1,1,2-Tetrachloroethane	89		89		70-130	0		20
Bromobenzene	89		88		70-130	1		20
n-Butylbenzene	91		89		70-130	2		20
sec-Butylbenzene	89		88		70-130	1		20
tert-Butylbenzene	89		89		70-130	0		20
o-Chlorotoluene	88		87		70-130	1		20
p-Chlorotoluene	88		88		70-130	0		20
1,2-Dibromo-3-chloropropane	82		80		70-130	2		20
Hexachlorobutadiene	84		82		70-130	2		20
Isopropylbenzene	89		88		70-130	1		20
p-Isopropyltoluene	90		89		70-130	1		20
Naphthalene	88		86		70-130	2		20
n-Propylbenzene	88		88		70-130	0		20
1,2,3-Trichlorobenzene	92		90		70-130	2		20
1,2,4-Trichlorobenzene	94		90		70-130	4		20
1,3,5-Trimethylbenzene	90		88		70-130	2		20
1,2,4-Trimethylbenzene	90		89		70-130	1		20
Diethyl ether	86		85		70-130	1		20
Diisopropyl Ether	83		83		70-130	0		20
Ethyl-Tert-Butyl-Ether	91		90		70-130	1		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2408101

Report Date: 02/21/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 07,12 Batch: WG1886042-3 WG1886042-4								
Tertiary-Amyl Methyl Ether	94		93		70-130	1		20
1,4-Dioxane	87		84		70-130	4		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	90		89		70-130
Toluene-d8	92		92		70-130
4-Bromofluorobenzene	94		94		70-130
Dibromofluoromethane	91		92		70-130

Lab Control Sample Analysis Batch Quality Control

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2408101

Report Date: 02/21/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-05,08-11,13 Batch: WG1886062-3 WG1886062-4								
Methylene chloride	77		78		70-130	1		20
1,1-Dichloroethane	81		81		70-130	0		20
Chloroform	84		84		70-130	0		20
Carbon tetrachloride	73		73		70-130	0		20
1,2-Dichloropropane	85		85		70-130	0		20
Dibromochloromethane	90		90		70-130	0		20
1,1,2-Trichloroethane	86		86		70-130	0		20
Tetrachloroethene	91		90		70-130	1		20
Chlorobenzene	86		85		70-130	1		20
Trichlorofluoromethane	73		72		70-130	1		20
1,2-Dichloroethane	84		84		70-130	0		20
1,1,1-Trichloroethane	86		85		70-130	1		20
Bromodichloromethane	87		86		70-130	1		20
trans-1,3-Dichloropropene	92		92		70-130	0		20
cis-1,3-Dichloropropene	92		92		70-130	0		20
1,1-Dichloropropene	88		88		70-130	0		20
Bromoform	89		87		70-130	2		20
1,1,2,2-Tetrachloroethane	83		82		70-130	1		20
Benzene	84		84		70-130	0		20
Toluene	84		84		70-130	0		20
Ethylbenzene	86		86		70-130	0		20
Chloromethane	67	Q	67	Q	70-130	0		20
Bromomethane	73		73		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2408101

Report Date: 02/21/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-05,08-11,13 Batch: WG1886062-3 WG1886062-4								
Vinyl chloride	72		72		70-130	0		20
Chloroethane	78		78		70-130	0		20
1,1-Dichloroethene	68	Q	68	Q	70-130	0		20
trans-1,2-Dichloroethene	80		80		70-130	0		20
Trichloroethene	86		86		70-130	0		20
1,2-Dichlorobenzene	88		87		70-130	1		20
1,3-Dichlorobenzene	88		87		70-130	1		20
1,4-Dichlorobenzene	87		86		70-130	1		20
Methyl tert butyl ether	86		86		70-130	0		20
p/m-Xylene	88		88		70-130	0		20
o-Xylene	88		88		70-130	0		20
cis-1,2-Dichloroethene	84		83		70-130	1		20
Dibromomethane	86		84		70-130	2		20
1,2,3-Trichloropropane	82		81		70-130	1		20
Styrene	90		90		70-130	0		20
Dichlorodifluoromethane	62	Q	62	Q	70-130	0		20
Acetone	64	Q	64	Q	70-130	0		20
Carbon disulfide	68	Q	68	Q	70-130	0		20
Methyl ethyl ketone	71		71		70-130	0		20
Methyl isobutyl ketone	85		85		70-130	0		20
2-Hexanone	78		76		70-130	3		20
Bromochloromethane	87		86		70-130	1		20
Tetrahydrofuran	65	Q	64	Q	70-130	2		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2408101

Report Date: 02/21/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-05,08-11,13 Batch: WG1886062-3 WG1886062-4								
2,2-Dichloropropane	87		86		70-130	1		20
1,2-Dibromoethane	88		87		70-130	1		20
1,3-Dichloropropane	86		85		70-130	1		20
1,1,1,2-Tetrachloroethane	89		89		70-130	0		20
Bromobenzene	89		88		70-130	1		20
n-Butylbenzene	91		89		70-130	2		20
sec-Butylbenzene	89		88		70-130	1		20
tert-Butylbenzene	89		89		70-130	0		20
o-Chlorotoluene	88		87		70-130	1		20
p-Chlorotoluene	88		88		70-130	0		20
1,2-Dibromo-3-chloropropane	82		80		70-130	2		20
Hexachlorobutadiene	84		82		70-130	2		20
Isopropylbenzene	89		88		70-130	1		20
p-Isopropyltoluene	90		89		70-130	1		20
Naphthalene	88		86		70-130	2		20
n-Propylbenzene	88		88		70-130	0		20
1,2,3-Trichlorobenzene	92		90		70-130	2		20
1,2,4-Trichlorobenzene	94		90		70-130	4		20
1,3,5-Trimethylbenzene	90		88		70-130	2		20
1,2,4-Trimethylbenzene	90		89		70-130	1		20
Diethyl ether	86		85		70-130	1		20
Diisopropyl Ether	83		83		70-130	0		20
Ethyl-Tert-Butyl-Ether	91		90		70-130	1		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2408101

Report Date: 02/21/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-05,08-11,13 Batch: WG1886062-3 WG1886062-4								
Tertiary-Amyl Methyl Ether	94		93		70-130	1		20
1,4-Dioxane	87		84		70-130	4		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	90		89		70-130
Toluene-d8	92		92		70-130
4-Bromofluorobenzene	94		94		70-130
Dibromofluoromethane	91		92		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2408101

Report Date: 02/21/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 06 Batch: WG1887347-3 WG1887347-4								
Methylene chloride	95		93		70-130	2		20
1,1-Dichloroethane	97		93		70-130	4		20
Chloroform	98		95		70-130	3		20
Carbon tetrachloride	100		97		70-130	3		20
1,2-Dichloropropane	90		87		70-130	3		20
Dibromochloromethane	96		95		70-130	1		20
1,1,2-Trichloroethane	87		86		70-130	1		20
Tetrachloroethene	111		106		70-130	5		20
Chlorobenzene	103		100		70-130	3		20
Trichlorofluoromethane	113		110		70-130	3		20
1,2-Dichloroethane	86		85		70-130	1		20
1,1,1-Trichloroethane	113		108		70-130	5		20
Bromodichloromethane	93		91		70-130	2		20
trans-1,3-Dichloropropene	90		88		70-130	2		20
cis-1,3-Dichloropropene	96		93		70-130	3		20
1,1-Dichloropropene	106		102		70-130	4		20
Bromoform	87		87		70-130	0		20
1,1,2,2-Tetrachloroethane	76		78		70-130	3		20
Benzene	103		99		70-130	4		20
Toluene	103		98		70-130	5		20
Ethylbenzene	104		101		70-130	3		20
Chloromethane	68	Q	64	Q	70-130	6		20
Bromomethane	120		109		70-130	10		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2408101

Report Date: 02/21/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 06 Batch: WG1887347-3 WG1887347-4								
Vinyl chloride	80		76		70-130	5		20
Chloroethane	98		93		70-130	5		20
1,1-Dichloroethene	110		106		70-130	4		20
trans-1,2-Dichloroethene	107		104		70-130	3		20
Trichloroethene	110		106		70-130	4		20
1,2-Dichlorobenzene	100		97		70-130	3		20
1,3-Dichlorobenzene	104		101		70-130	3		20
1,4-Dichlorobenzene	103		99		70-130	4		20
Methyl tert butyl ether	85		85		70-130	0		20
p/m-Xylene	110		106		70-130	4		20
o-Xylene	104		101		70-130	3		20
cis-1,2-Dichloroethene	102		98		70-130	4		20
Dibromomethane	89		87		70-130	2		20
1,2,3-Trichloropropane	76		77		70-130	1		20
Styrene	102		99		70-130	3		20
Dichlorodifluoromethane	49	Q	46	Q	70-130	6		20
Acetone	68	Q	67	Q	70-130	1		20
Carbon disulfide	97		94		70-130	3		20
Methyl ethyl ketone	62	Q	65	Q	70-130	5		20
Methyl isobutyl ketone	69	Q	70		70-130	1		20
2-Hexanone	64	Q	65	Q	70-130	2		20
Bromochloromethane	97		95		70-130	2		20
Tetrahydrofuran	58	Q	63	Q	70-130	8		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2408101

Report Date: 02/21/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 06 Batch: WG1887347-3 WG1887347-4								
2,2-Dichloropropane	106		101		70-130	5		20
1,2-Dibromoethane	92		91		70-130	1		20
1,3-Dichloropropane	88		87		70-130	1		20
1,1,1,2-Tetrachloroethane	102		100		70-130	2		20
Bromobenzene	99		96		70-130	3		20
n-Butylbenzene	107		103		70-130	4		20
sec-Butylbenzene	108		103		70-130	5		20
tert-Butylbenzene	107		102		70-130	5		20
o-Chlorotoluene	95		94		70-130	1		20
p-Chlorotoluene	98		93		70-130	5		20
1,2-Dibromo-3-chloropropane	74		79		70-130	7		20
Hexachlorobutadiene	115		111		70-130	4		20
Isopropylbenzene	105		100		70-130	5		20
p-Isopropyltoluene	108		104		70-130	4		20
Naphthalene	95		91		70-130	4		20
n-Propylbenzene	104		100		70-130	4		20
1,2,3-Trichlorobenzene	103		100		70-130	3		20
1,2,4-Trichlorobenzene	109		105		70-130	4		20
1,3,5-Trimethylbenzene	102		98		70-130	4		20
1,2,4-Trimethylbenzene	99		95		70-130	4		20
Diethyl ether	89		89		70-130	0		20
Diisopropyl Ether	85		82		70-130	4		20
Ethyl-Tert-Butyl-Ether	87		86		70-130	1		20

Lab Control Sample Analysis Batch Quality Control

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2408101

Report Date: 02/21/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 06 Batch: WG1887347-3 WG1887347-4								
Tertiary-Amyl Methyl Ether	87		87		70-130	0		20
1,4-Dioxane	77		76		70-130	1		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	84		84		70-130
Toluene-d8	92		91		70-130
4-Bromofluorobenzene	87		87		70-130
Dibromofluoromethane	96		97		70-130

Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2408101

Report Date: 02/21/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 06 Batch: WG1887734-3 WG1887734-4								
Methylene chloride	96		96		70-130	0		20
1,1-Dichloroethane	98		98		70-130	0		20
Chloroform	99		100		70-130	1		20
Carbon tetrachloride	99		99		70-130	0		20
1,2-Dichloropropane	92		92		70-130	0		20
Dibromochloromethane	98		101		70-130	3		20
1,1,2-Trichloroethane	90		92		70-130	2		20
Tetrachloroethene	108		108		70-130	0		20
Chlorobenzene	103		104		70-130	1		20
Trichlorofluoromethane	106		106		70-130	0		20
1,2-Dichloroethane	88		90		70-130	2		20
1,1,1-Trichloroethane	112		111		70-130	1		20
Bromodichloromethane	96		96		70-130	0		20
trans-1,3-Dichloropropene	92		93		70-130	1		20
cis-1,3-Dichloropropene	97		98		70-130	1		20
1,1-Dichloropropene	104		104		70-130	0		20
Bromoform	94		96		70-130	2		20
1,1,2,2-Tetrachloroethane	84		85		70-130	1		20
Benzene	103		104		70-130	1		20
Toluene	102		102		70-130	0		20
Ethylbenzene	105		105		70-130	0		20
Chloromethane	66	Q	65	Q	70-130	2		20
Bromomethane	108		108		70-130	0		20

Lab Control Sample Analysis Batch Quality Control

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2408101

Report Date: 02/21/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 06 Batch: WG1887734-3 WG1887734-4								
Vinyl chloride	75		76		70-130	1		20
Chloroethane	95		95		70-130	0		20
1,1-Dichloroethene	108		107		70-130	1		20
trans-1,2-Dichloroethene	108		107		70-130	1		20
Trichloroethene	108		109		70-130	1		20
1,2-Dichlorobenzene	102		102		70-130	0		20
1,3-Dichlorobenzene	106		105		70-130	1		20
1,4-Dichlorobenzene	104		104		70-130	0		20
Methyl tert butyl ether	88		90		70-130	2		20
p/m-Xylene	109		110		70-130	1		20
o-Xylene	104		104		70-130	0		20
cis-1,2-Dichloroethene	102		103		70-130	1		20
Dibromomethane	92		93		70-130	1		20
1,2,3-Trichloropropane	81		83		70-130	2		20
Styrene	101		101		70-130	0		20
Dichlorodifluoromethane	41	Q	41	Q	70-130	0		20
Acetone	77		69	Q	70-130	11		20
Carbon disulfide	96		96		70-130	0		20
Methyl ethyl ketone	68	Q	70		70-130	3		20
Methyl isobutyl ketone	73		76		70-130	4		20
2-Hexanone	69	Q	70		70-130	1		20
Bromochloromethane	98		99		70-130	1		20
Tetrahydrofuran	64	Q	64	Q	70-130	0		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2408101

Report Date: 02/21/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 06 Batch: WG1887734-3 WG1887734-4								
2,2-Dichloropropane	105		105		70-130	0		20
1,2-Dibromoethane	95		96		70-130	1		20
1,3-Dichloropropane	90		92		70-130	2		20
1,1,1,2-Tetrachloroethane	104		105		70-130	1		20
Bromobenzene	101		100		70-130	1		20
n-Butylbenzene	108		106		70-130	2		20
sec-Butylbenzene	108		107		70-130	1		20
tert-Butylbenzene	107		106		70-130	1		20
o-Chlorotoluene	95		98		70-130	3		20
p-Chlorotoluene	99		98		70-130	1		20
1,2-Dibromo-3-chloropropane	86		87		70-130	1		20
Hexachlorobutadiene	116		115		70-130	1		20
Isopropylbenzene	104		104		70-130	0		20
p-Isopropyltoluene	109		108		70-130	1		20
Naphthalene	96		96		70-130	0		20
n-Propylbenzene	105		104		70-130	1		20
1,2,3-Trichlorobenzene	107		107		70-130	0		20
1,2,4-Trichlorobenzene	114		112		70-130	2		20
1,3,5-Trimethylbenzene	103		101		70-130	2		20
1,2,4-Trimethylbenzene	100		100		70-130	0		20
Diethyl ether	91		94		70-130	3		20
Diisopropyl Ether	86		87		70-130	1		20
Ethyl-Tert-Butyl-Ether	90		91		70-130	1		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2408101

Report Date: 02/21/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 06 Batch: WG1887734-3 WG1887734-4								
Tertiary-Amyl Methyl Ether	89		91		70-130	2		20
1,4-Dioxane	90		91		70-130	1		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	84		86		70-130
Toluene-d8	91		91		70-130
4-Bromofluorobenzene	85		86		70-130
Dibromofluoromethane	96		98		70-130

INORGANICS & MISCELLANEOUS

Project Name: TUFTS STREET**Project Number:** 045163**Lab Number:** L2408101**Report Date:** 02/21/24**SAMPLE RESULTS****Lab ID:** L2408101-01**Client ID:** 50TUFT-B101(0-1)**Sample Location:** SOMERVILLE, MA**Date Collected:** 02/12/24 08:30**Date Received:** 02/14/24**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	80.0		%	0.100	NA	1	-	02/15/24 08:23	121,2540G	ROI



Project Name: TUFTS STREET**Project Number:** 045163**Lab Number:** L2408101**Report Date:** 02/21/24**SAMPLE RESULTS****Lab ID:** L2408101-02**Client ID:** 50TUFT-B101(1-3)**Sample Location:** SOMERVILLE, MA**Date Collected:** 02/12/24 08:31**Date Received:** 02/14/24**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	89.7		%	0.100	NA	1	-	02/15/24 08:23	121,2540G	ROI



Project Name: TUFTS STREET**Project Number:** 045163**Lab Number:** L2408101**Report Date:** 02/21/24**SAMPLE RESULTS****Lab ID:** L2408101-03**Client ID:** 50TUFT-B101(3-5)**Sample Location:** SOMERVILLE, MA**Date Collected:** 02/12/24 08:32**Date Received:** 02/14/24**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	91.1		%	0.100	NA	1	-	02/15/24 08:23	121,2540G	ROI



Project Name: TUFTS STREET**Project Number:** 045163**Lab Number:** L2408101**Report Date:** 02/21/24**SAMPLE RESULTS****Lab ID:** L2408101-04**Client ID:** 50TUFT-B102(0-1)**Sample Location:** SOMERVILLE, MA**Date Collected:** 02/12/24 09:00**Date Received:** 02/14/24**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	93.6		%	0.100	NA	1	-	02/15/24 08:23	121,2540G	ROI



Project Name: TUFTS STREET**Project Number:** 045163**Lab Number:** L2408101**Report Date:** 02/21/24**SAMPLE RESULTS****Lab ID:** L2408101-05**Client ID:** 50TUFT-B102(1-3)**Sample Location:** SOMERVILLE, MA**Date Collected:** 02/12/24 09:01**Date Received:** 02/14/24**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	91.6		%	0.100	NA	1	-	02/15/24 08:23	121,2540G	ROI



Project Name: TUFTS STREET**Project Number:** 045163**Lab Number:** L2408101**Report Date:** 02/21/24**SAMPLE RESULTS****Lab ID:** L2408101-06**Client ID:** 50TUFT-B103(0-1)**Sample Location:** SOMERVILLE, MA**Date Collected:** 02/12/24 09:30**Date Received:** 02/14/24**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	90.1		%	0.100	NA	1	-	02/15/24 08:23	121,2540G	ROI



Project Name: TUFTS STREET**Project Number:** 045163**Lab Number:** L2408101**Report Date:** 02/21/24**SAMPLE RESULTS****Lab ID:** L2408101-07**Client ID:** 50TUFT-B103(1-3)**Sample Location:** SOMERVILLE, MA**Date Collected:** 02/12/24 09:31**Date Received:** 02/14/24**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	81.4		%	0.100	NA	1	-	02/15/24 08:23	121,2540G	ROI



Project Name: TUFTS STREET**Project Number:** 045163**Lab Number:** L2408101**Report Date:** 02/21/24**SAMPLE RESULTS****Lab ID:** L2408101-08**Client ID:** 50TUFT-B103(3-5)**Sample Location:** SOMERVILLE, MA**Date Collected:** 02/12/24 09:32**Date Received:** 02/14/24**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	85.7		%	0.100	NA	1	-	02/15/24 08:23	121,2540G	ROI



Project Name: TUFTS STREET**Project Number:** 045163**Lab Number:** L2408101**Report Date:** 02/21/24**SAMPLE RESULTS****Lab ID:** L2408101-09**Client ID:** 50TUFT-B104(0-1)**Sample Location:** SOMERVILLE, MA**Date Collected:** 02/12/24 10:00**Date Received:** 02/14/24**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	90.8		%	0.100	NA	1	-	02/15/24 08:23	121,2540G	ROI



Project Name: TUFTS STREET**Project Number:** 045163**Lab Number:** L2408101**Report Date:** 02/21/24**SAMPLE RESULTS****Lab ID:** L2408101-10**Client ID:** 50TUFT-B104(1-3)**Sample Location:** SOMERVILLE, MA**Date Collected:** 02/12/24 10:01**Date Received:** 02/14/24**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	79.6		%	0.100	NA	1	-	02/15/24 08:23	121,2540G	ROI



Project Name: TUFTS STREET**Project Number:** 045163**Lab Number:** L2408101**Report Date:** 02/21/24**SAMPLE RESULTS****Lab ID:** L2408101-11**Client ID:** 50TUFT-B104(3-5)**Sample Location:** SOMERVILLE, MA**Date Collected:** 02/12/24 10:02**Date Received:** 02/14/24**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	82.3		%	0.100	NA	1	-	02/15/24 08:23	121,2540G	ROI



Project Name: TUFTS STREET**Project Number:** 045163**Lab Number:** L2408101**Report Date:** 02/21/24**SAMPLE RESULTS****Lab ID:** L2408101-12**Client ID:** 50TUFT-B105(0-1)**Sample Location:** SOMERVILLE, MA**Date Collected:** 02/12/24 11:00**Date Received:** 02/14/24**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	92.1		%	0.100	NA	1	-	02/15/24 08:23	121,2540G	ROI



Project Name: TUFTS STREET**Project Number:** 045163**Lab Number:** L2408101**Report Date:** 02/21/24**SAMPLE RESULTS****Lab ID:** L2408101-13**Client ID:** 50TUFT-B105(1-3)**Sample Location:** SOMERVILLE, MA**Date Collected:** 02/12/24 11:01**Date Received:** 02/14/24**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	82.8		%	0.100	NA	1	-	02/15/24 08:23	121,2540G	ROI



Lab Duplicate Analysis
*Batch Quality Control***Project Name:** TUFTS STREET**Project Number:** 045163**Lab Number:** L2408101**Report Date:** 02/21/24

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-13 QC Batch ID: WG1885410-1 QC Sample: L2408101-01 Client ID: 50TUFT-B101(0-1)						
Solids, Total	80.0	79.7	%	0		20

Project Name: TUFTS STREET
Project Number: 045163

Serial_No:02212414:57
Lab Number: L2408101
Report Date: 02/21/24

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2408101-01A	Vial MeOH preserved	A	NA		2.8	Y	Absent		MCP-8260HLW-21(14)
L2408101-01B	Vial water preserved	A	NA		2.8	Y	Absent	12-FEB-24 12:45	MCP-8260HLW-21(14)
L2408101-01C	Vial water preserved	A	NA		2.8	Y	Absent	12-FEB-24 12:45	MCP-8260HLW-21(14)
L2408101-01D	Plastic 2oz unpreserved for TS	A	NA		2.8	Y	Absent		TS(7)
L2408101-02A	Vial MeOH preserved	A	NA		2.8	Y	Absent		MCP-8260HLW-21(14)
L2408101-02B	Vial water preserved	A	NA		2.8	Y	Absent	12-FEB-24 12:45	MCP-8260HLW-21(14)
L2408101-02C	Vial water preserved	A	NA		2.8	Y	Absent	12-FEB-24 12:45	MCP-8260HLW-21(14)
L2408101-02D	Plastic 2oz unpreserved for TS	A	NA		2.8	Y	Absent		TS(7)
L2408101-03A	Vial MeOH preserved	A	NA		2.8	Y	Absent		MCP-8260HLW-21(14)
L2408101-03B	Vial water preserved	A	NA		2.8	Y	Absent	12-FEB-24 12:45	MCP-8260HLW-21(14)
L2408101-03C	Vial water preserved	A	NA		2.8	Y	Absent	12-FEB-24 12:45	MCP-8260HLW-21(14)
L2408101-03D	Plastic 2oz unpreserved for TS	A	NA		2.8	Y	Absent		TS(7)
L2408101-04A	Vial MeOH preserved	A	NA		2.8	Y	Absent		MCP-8260HLW-21(14)
L2408101-04B	Vial water preserved	A	NA		2.8	Y	Absent	12-FEB-24 12:45	MCP-8260HLW-21(14)
L2408101-04C	Vial water preserved	A	NA		2.8	Y	Absent	12-FEB-24 12:45	MCP-8260HLW-21(14)
L2408101-04D	Plastic 2oz unpreserved for TS	A	NA		2.8	Y	Absent		TS(7)
L2408101-05A	Vial MeOH preserved	A	NA		2.8	Y	Absent		MCP-8260HLW-21(14)
L2408101-05B	Vial water preserved	A	NA		2.8	Y	Absent	12-FEB-24 12:45	MCP-8260HLW-21(14)
L2408101-05C	Vial water preserved	A	NA		2.8	Y	Absent	12-FEB-24 12:45	MCP-8260HLW-21(14)
L2408101-05D	Plastic 2oz unpreserved for TS	A	NA		2.8	Y	Absent		TS(7)
L2408101-06A	Vial MeOH preserved	A	NA		2.8	Y	Absent		MCP-8260HLW-21(14)
L2408101-06B	Vial water preserved	A	NA		2.8	Y	Absent	12-FEB-24 12:45	MCP-8260HLW-21(14)
L2408101-06C	Vial water preserved	A	NA		2.8	Y	Absent	12-FEB-24 12:45	MCP-8260HLW-21(14)

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2408101-06D	Plastic 2oz unpreserved for TS	A	NA		2.8	Y	Absent		TS(7)
L2408101-07A	Vial MeOH preserved	A	NA		2.8	Y	Absent		MCP-8260HLW-21(14)
L2408101-07B	Vial water preserved	A	NA		2.8	Y	Absent	12-FEB-24 12:45	MCP-8260HLW-21(14)
L2408101-07C	Vial water preserved	A	NA		2.8	Y	Absent	12-FEB-24 12:45	MCP-8260HLW-21(14)
L2408101-07D	Plastic 2oz unpreserved for TS	A	NA		2.8	Y	Absent		TS(7)
L2408101-08A	Vial MeOH preserved	A	NA		2.8	Y	Absent		MCP-8260HLW-21(14)
L2408101-08B	Vial water preserved	A	NA		2.8	Y	Absent	12-FEB-24 12:45	MCP-8260HLW-21(14)
L2408101-08C	Vial water preserved	A	NA		2.8	Y	Absent	12-FEB-24 12:45	MCP-8260HLW-21(14)
L2408101-08D	Plastic 2oz unpreserved for TS	A	NA		2.8	Y	Absent		TS(7)
L2408101-09A	Vial MeOH preserved	A	NA		2.8	Y	Absent		MCP-8260HLW-21(14)
L2408101-09B	Vial water preserved	A	NA		2.8	Y	Absent	12-FEB-24 12:45	MCP-8260HLW-21(14)
L2408101-09C	Vial water preserved	A	NA		2.8	Y	Absent	12-FEB-24 12:45	MCP-8260HLW-21(14)
L2408101-09D	Plastic 2oz unpreserved for TS	A	NA		2.8	Y	Absent		TS(7)
L2408101-10A	Vial MeOH preserved	A	NA		2.8	Y	Absent		MCP-8260HLW-21(14)
L2408101-10B	Vial water preserved	A	NA		2.8	Y	Absent	12-FEB-24 12:45	MCP-8260HLW-21(14)
L2408101-10C	Vial water preserved	A	NA		2.8	Y	Absent	12-FEB-24 12:45	MCP-8260HLW-21(14)
L2408101-10D	Plastic 2oz unpreserved for TS	A	NA		2.8	Y	Absent		TS(7)
L2408101-11A	Vial MeOH preserved	A	NA		2.8	Y	Absent		MCP-8260HLW-21(14)
L2408101-11B	Vial water preserved	A	NA		2.8	Y	Absent	12-FEB-24 12:45	MCP-8260HLW-21(14)
L2408101-11C	Vial water preserved	A	NA		2.8	Y	Absent	12-FEB-24 12:45	MCP-8260HLW-21(14)
L2408101-11D	Plastic 2oz unpreserved for TS	A	NA		2.8	Y	Absent		TS(7)
L2408101-12A	Vial MeOH preserved	A	NA		2.8	Y	Absent		MCP-8260HLW-21(14)
L2408101-12B	Vial water preserved	A	NA		2.8	Y	Absent	12-FEB-24 12:45	MCP-8260HLW-21(14)
L2408101-12C	Vial water preserved	A	NA		2.8	Y	Absent	12-FEB-24 12:45	MCP-8260HLW-21(14)
L2408101-12D	Plastic 2oz unpreserved for TS	A	NA		2.8	Y	Absent		TS(7)
L2408101-13A	Vial MeOH preserved	A	NA		2.8	Y	Absent		MCP-8260HLW-21(14)
L2408101-13B	Vial water preserved	A	NA		2.8	Y	Absent	12-FEB-24 12:45	MCP-8260HLW-21(14)
L2408101-13C	Vial water preserved	A	NA		2.8	Y	Absent	12-FEB-24 12:45	MCP-8260HLW-21(14)

Project Name: TUFTS STREET
Project Number: 045163

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Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2408101-13D	Plastic 2oz unpreserved for TS	A	NA		2.8	Y	Absent		TS(7)

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2408101
Report Date: 02/21/24

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report



Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2408101
Report Date: 02/21/24

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

Report Format: Data Usability Report



Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2408101
Report Date: 02/21/24

Data Qualifiers

- ND** - Not detected at the reporting limit (RL) for the sample.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2408101
Report Date: 02/21/24

REFERENCES

- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.
- 141 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA and IIB, November 2021.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Alpha Analytical, Inc.Facility: **Company-wide**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

Revision 20

Published Date: 6/16/2023 4:52:28 PM

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Certification Information**The following analytes are not included in our Primary NELAP Scope of Accreditation:****Westborough Facility****EPA 624.1:** m/p-xylene, o-xylene, Naphthalene**EPA 625.1:** alpha-Terpineol**EPA 8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.**Mansfield Facility****SM 2540D:** TSS.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B**The following analytes are included in our Massachusetts DEP Scope of Accreditation****Westborough Facility:****Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,****EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.****Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:**Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,****SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II,

Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables).**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.****Mansfield Facility:****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.****EPA 522, EPA 537.1.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1 Hg.****SM2340B**

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

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Method Blank Summary

Form 4

Volatiles

Client : GEI Consultants
Project Name : TUFTS STREET
Lab Sample ID : WG1886042-5
Instrument ID : VOA100
Matrix : SOIL

Lab Number : L2408101
Project Number : 045163
Lab File ID : V00240215A06
Analysis Date : 02/15/24 13:52

Client Sample No.	Lab Sample ID	Analysis Date
WG1886042-3LCS	WG1886042-3	02/15/24 11:51
WG1886042-4LCSD	WG1886042-4	02/15/24 12:22
50TUFT-B103(1-3)	L2408101-07	02/15/24 20:26
50TUFT-B105(0-1)	L2408101-12	02/15/24 20:57

Method Blank Summary

Form 4

Volatiles

Client	: GEI Consultants	Lab Number	: L2408101
Project Name	: TUFTS STREET	Project Number	: 045163
Lab Sample ID	: WG1886062-5	Lab File ID	: V00240215A06
Instrument ID	: VOA100		
Matrix	: SOIL	Analysis Date	: 02/15/24 13:52

Client Sample No.	Lab Sample ID	Analysis Date
WG1886062-3LCS	WG1886062-3	02/15/24 11:51
WG1886062-4LCSD	WG1886062-4	02/15/24 12:22
50TUFT-B101(0-1)	L2408101-01	02/15/24 15:23
50TUFT-B101(1-3)	L2408101-02	02/15/24 15:54
50TUFT-B101(3-5)	L2408101-03	02/15/24 16:24
50TUFT-B102(0-1)	L2408101-04	02/15/24 16:54
50TUFT-B102(1-3)	L2408101-05	02/15/24 17:25
50TUFT-B103(3-5)	L2408101-08	02/15/24 17:55
50TUFT-B104(0-1)	L2408101-09	02/15/24 18:25
50TUFT-B104(1-3)	L2408101-10	02/15/24 18:56
50TUFT-B104(3-5)	L2408101-11	02/15/24 19:26
50TUFT-B105(1-3)	L2408101-13	02/15/24 19:56

Method Blank Summary

Form 4

Volatiles

Client : GEI Consultants
Project Name : TUFTS STREET
Lab Sample ID : WG1887347-5
Instrument ID : VOA123
Matrix : SOIL

Lab Number : L2408101
Project Number : 045163
Lab File ID : V23240220A05
Analysis Date : 02/20/24 10:26

Client Sample No.	Lab Sample ID	Analysis Date
WG1887347-3LCS	WG1887347-3	02/20/24 08:43
WG1887347-4LCSD	WG1887347-4	02/20/24 09:09
50TUFT-B103(0-1)	L2408101-06	02/20/24 14:19

Method Blank Summary

Form 4

Volatiles

Client : GEI Consultants
Project Name : TUFTS STREET
Lab Sample ID : WG1887734-5
Instrument ID : VOA123
Matrix : SOIL

Lab Number : L2408101
Project Number : 045163
Lab File ID : V23240221A05
Analysis Date : 02/21/24 09:56

Client Sample No.	Lab Sample ID	Analysis Date
WG1887734-3LCS	WG1887734-3	02/21/24 08:39
WG1887734-4LCSD	WG1887734-4	02/21/24 09:05
50TUFT-B103(0-1)	L2408101-06D	02/21/24 12:25

Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : TUFTS STREET
 Instrument ID : VOA100
 Lab File ID : V00240215A02
 Sample No : WG1886062-2
 Channel :

Lab Number : L2408101
 Project Number : 045163
 Calibration Date : 02/15/24 11:51
 Init. Calib. Date(s) : 02/07/24 02/08/24
 Init. Calib. Times : 20:14 01:16

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	159	0
Dichlorodifluoromethane	0.319	0.199	-	37.6*	20	106	0
Chloromethane	0.487	0.328	-	32.6*	20	105	0
Vinyl chloride	0.371	0.265	-	28.6*	20	113	0
Bromomethane	0.176	0.129	-	26.7*	20	118	0
Chloroethane	0.187	0.145	-	22.5*	20	117	0
Trichlorofluoromethane	0.338	0.247	-	26.9*	20	125	0
Ethyl ether	0.105	0.091	-	13.3	20	130	0
1,1-Dichloroethene	40	27.291	-	31.8*	20	127	0
Carbon disulfide	0.84	0.567	-	32.5*	20	122	0
Methylene chloride	0.23	0.178	-	22.6*	20	121	0
Acetone	0.086	0.056	-	34.9*	20	110	0
trans-1,2-Dichloroethene	0.224	0.179	-	20.1*	20	124	0
Methyl tert-butyl ether	0.574	0.494	-	13.9	20	131	0
Diisopropyl ether	1.101	0.913	-	17.1	20	123	0
1,1-Dichloroethane	0.55	0.445	-	19.1	20	122	0
Ethyl tert-butyl ether	0.911	0.825	-	9.4	20	133	0
cis-1,2-Dichloroethene	0.267	0.223	-	16.5	20	129	0
2,2-Dichloropropane	0.344	0.298	-	13.4	20	139	0
Bromochloromethane	0.125	0.108	-	13.6	20	131	0
Chloroform	0.431	0.364	-	15.5	20	128	0
Carbon tetrachloride	40	29.31	-	26.7*	20	139	0
Tetrahydrofuran	0.09	0.059	-	34.4*	20	114	0
Dibromofluoromethane	0.275	0.25	-	9.1	20	142	0
1,1,1-Trichloroethane	0.352	0.302	-	14.2	20	135	0
2-Butanone	0.125	0.089	-	28.8*	20	118	0
1,1-Dichloropropene	0.307	0.269	-	12.4	20	138	0
Benzene	0.934	0.783	-	16.2	20	127	0
tert-Amyl methyl ether	0.606	0.567	-	6.4	20	141	0
1,2-Dichloroethane-d4	0.301	0.27	-	10.3	20	146	0
1,2-Dichloroethane	0.342	0.287	-	16.1	20	130	0
Trichloroethene	0.242	0.208	-	14	20	138	0
Dibromomethane	0.137	0.118	-	13.9	20	128	0
1,2-Dichloropropane	0.302	0.255	-	15.6	20	126	0
Bromodichloromethane	0.308	0.267*	-	13.3	20	126	0
1,4-Dioxane	0.00217	0.00189*	-	12.9	20	123	0
cis-1,3-Dichloropropene	0.362	0.333	-	8	20	130	0
Chlorobenzene-d5	1	1	-	0	20	155	0
Toluene-d8	1.383	1.273	-	8	20	142	0
Toluene	0.781	0.659	-	15.6	20	128	0
4-Methyl-2-pentanone	0.12	0.102	-	15	20	123	0
Tetrachloroethene	0.325	0.297	-	8.6	20	140	0
trans-1,3-Dichloropropene	0.418	0.384	-	8.1	20	133	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : TUFTS STREET
 Instrument ID : VOA100
 Lab File ID : V00240215A02
 Sample No : WG1886062-2
 Channel :

Lab Number : L2408101
 Project Number : 045163
 Calibration Date : 02/15/24 11:51
 Init. Calib. Date(s) : 02/07/24 02/08/24
 Init. Calib. Times : 20:14 01:16

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,1,2-Trichloroethane	0.208	0.179*	-	13.9	20	129	0
Chlorodibromomethane	0.31	0.28	-	9.7	20	131	0
1,3-Dichloropropane	0.436	0.375	-	14	20	129	0
1,2-Dibromoethane	0.252	0.223	-	11.5	20	130	0
2-Hexanone	0.224	0.174	-	22.3*	20	118	0
Chlorobenzene	0.884	0.756	-	14.5	20	129	0
Ethylbenzene	1.461	1.258	-	13.9	20	132	0
1,1,1,2-Tetrachloroethane	0.315	0.281	-	10.8	20	128	0
p/m Xylene	0.563	0.498	-	11.5	20	132	0
o Xylene	0.551	0.484	-	12.2	20	129	0
Styrene	0.901	0.81	-	10.1	20	130	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	152	0
Bromoform	0.373	0.333	-	10.7	20	131	0
Isopropylbenzene	2.707	2.418	-	10.7	20	134	0
4-Bromofluorobenzene	0.905	0.852	-	5.9	20	144	0
Bromobenzene	0.701	0.621	-	11.4	20	131	0
n-Propylbenzene	3.172	2.808	-	11.5	20	135	0
1,1,2,2-Tetrachloroethane	0.592	0.491	-	17.1	20	124	0
2-Chlorotoluene	1.899	1.662	-	12.5	20	131	0
1,3,5-Trimethylbenzene	2.325	2.087	-	10.2	20	137	0
1,2,3-Trichloropropane	0.478	0.394	-	17.6	20	126	0
4-Chlorotoluene	1.944	1.719	-	11.6	20	136	0
tert-Butylbenzene	2.015	1.79	-	11.2	20	138	0
1,2,4-Trimethylbenzene	2.268	2.039	-	10.1	20	136	0
sec-Butylbenzene	2.967	2.653	-	10.6	20	139	0
p-Isopropyltoluene	2.612	2.361	-	9.6	20	141	0
1,3-Dichlorobenzene	1.387	1.219	-	12.1	20	131	0
1,4-Dichlorobenzene	1.4	1.222	-	12.7	20	132	0
n-Butylbenzene	2.247	2.037	-	9.3	20	137	0
1,2-Dichlorobenzene	1.285	1.136	-	11.6	20	129	0
1,2-Dibromo-3-chloropropan	0.111	0.091	-	18	20	118	0
Hexachlorobutadiene	0.494	0.418	-	15.4	20	139	0
1,2,4-Trichlorobenzene	0.905	0.847	-	6.4	20	140	0
Naphthalene	2.069	1.829	-	11.6	20	127	0
1,2,3-Trichlorobenzene	0.847	0.778	-	8.1	20	135	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : TUFTS STREET
 Instrument ID : VOA100
 Lab File ID : V00240215A02
 Sample No : WG1886042-2
 Channel :

Lab Number : L2408101
 Project Number : 045163
 Calibration Date : 02/15/24 11:51
 Init. Calib. Date(s) : 02/07/24 02/08/24
 Init. Calib. Times : 20:14 01:16

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	159	0
Dichlorodifluoromethane	0.319	0.199	-	37.6*	20	106	0
Chloromethane	0.487	0.328	-	32.6*	20	105	0
Vinyl chloride	0.371	0.265	-	28.6*	20	113	0
Bromomethane	0.176	0.129	-	26.7*	20	118	0
Chloroethane	0.187	0.145	-	22.5*	20	117	0
Trichlorofluoromethane	0.338	0.247	-	26.9*	20	125	0
Ethyl ether	0.105	0.091	-	13.3	20	130	0
1,1-Dichloroethene	40	27.291	-	31.8*	20	127	0
Carbon disulfide	0.84	0.567	-	32.5*	20	122	0
Methylene chloride	0.23	0.178	-	22.6*	20	121	0
Acetone	0.086	0.056	-	34.9*	20	110	0
trans-1,2-Dichloroethene	0.224	0.179	-	20.1*	20	124	0
Methyl tert-butyl ether	0.574	0.494	-	13.9	20	131	0
Diisopropyl ether	1.101	0.913	-	17.1	20	123	0
1,1-Dichloroethane	0.55	0.445	-	19.1	20	122	0
Ethyl tert-butyl ether	0.911	0.825	-	9.4	20	133	0
cis-1,2-Dichloroethene	0.267	0.223	-	16.5	20	129	0
2,2-Dichloropropane	0.344	0.298	-	13.4	20	139	0
Bromochloromethane	0.125	0.108	-	13.6	20	131	0
Chloroform	0.431	0.364	-	15.5	20	128	0
Carbon tetrachloride	40	29.31	-	26.7*	20	139	0
Tetrahydrofuran	0.09	0.059	-	34.4*	20	114	0
Dibromofluoromethane	0.275	0.25	-	9.1	20	142	0
1,1,1-Trichloroethane	0.352	0.302	-	14.2	20	135	0
2-Butanone	0.125	0.089	-	28.8*	20	118	0
1,1-Dichloropropene	0.307	0.269	-	12.4	20	138	0
Benzene	0.934	0.783	-	16.2	20	127	0
tert-Amyl methyl ether	0.606	0.567	-	6.4	20	141	0
1,2-Dichloroethane-d4	0.301	0.27	-	10.3	20	146	0
1,2-Dichloroethane	0.342	0.287	-	16.1	20	130	0
Trichloroethene	0.242	0.208	-	14	20	138	0
Dibromomethane	0.137	0.118	-	13.9	20	128	0
1,2-Dichloropropane	0.302	0.255	-	15.6	20	126	0
Bromodichloromethane	0.308	0.267*	-	13.3	20	126	0
1,4-Dioxane	0.00217	0.00189*	-	12.9	20	123	0
cis-1,3-Dichloropropene	0.362	0.333	-	8	20	130	0
Chlorobenzene-d5	1	1	-	0	20	155	0
Toluene-d8	1.383	1.273	-	8	20	142	0
Toluene	0.781	0.659	-	15.6	20	128	0
4-Methyl-2-pentanone	0.12	0.102	-	15	20	123	0
Tetrachloroethene	0.325	0.297	-	8.6	20	140	0
trans-1,3-Dichloropropene	0.418	0.384	-	8.1	20	133	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : TUFTS STREET
 Instrument ID : VOA100
 Lab File ID : V00240215A02
 Sample No : WG1886042-2
 Channel :

Lab Number : L2408101
 Project Number : 045163
 Calibration Date : 02/15/24 11:51
 Init. Calib. Date(s) : 02/07/24 02/08/24
 Init. Calib. Times : 20:14 01:16

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,1,2-Trichloroethane	0.208	0.179*	-	13.9	20	129	0
Chlorodibromomethane	0.31	0.28	-	9.7	20	131	0
1,3-Dichloropropane	0.436	0.375	-	14	20	129	0
1,2-Dibromoethane	0.252	0.223	-	11.5	20	130	0
2-Hexanone	0.224	0.174	-	22.3*	20	118	0
Chlorobenzene	0.884	0.756	-	14.5	20	129	0
Ethylbenzene	1.461	1.258	-	13.9	20	132	0
1,1,1,2-Tetrachloroethane	0.315	0.281	-	10.8	20	128	0
p/m Xylene	0.563	0.498	-	11.5	20	132	0
o Xylene	0.551	0.484	-	12.2	20	129	0
Styrene	0.901	0.81	-	10.1	20	130	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	152	0
Bromoform	0.373	0.333	-	10.7	20	131	0
Isopropylbenzene	2.707	2.418	-	10.7	20	134	0
4-Bromofluorobenzene	0.905	0.852	-	5.9	20	144	0
Bromobenzene	0.701	0.621	-	11.4	20	131	0
n-Propylbenzene	3.172	2.808	-	11.5	20	135	0
1,1,2,2-Tetrachloroethane	0.592	0.491	-	17.1	20	124	0
2-Chlorotoluene	1.899	1.662	-	12.5	20	131	0
1,3,5-Trimethylbenzene	2.325	2.087	-	10.2	20	137	0
1,2,3-Trichloropropane	0.478	0.394	-	17.6	20	126	0
4-Chlorotoluene	1.944	1.719	-	11.6	20	136	0
tert-Butylbenzene	2.015	1.79	-	11.2	20	138	0
1,2,4-Trimethylbenzene	2.268	2.039	-	10.1	20	136	0
sec-Butylbenzene	2.967	2.653	-	10.6	20	139	0
p-Isopropyltoluene	2.612	2.361	-	9.6	20	141	0
1,3-Dichlorobenzene	1.387	1.219	-	12.1	20	131	0
1,4-Dichlorobenzene	1.4	1.222	-	12.7	20	132	0
n-Butylbenzene	2.247	2.037	-	9.3	20	137	0
1,2-Dichlorobenzene	1.285	1.136	-	11.6	20	129	0
1,2-Dibromo-3-chloropropan	0.111	0.091	-	18	20	118	0
Hexachlorobutadiene	0.494	0.418	-	15.4	20	139	0
1,2,4-Trichlorobenzene	0.905	0.847	-	6.4	20	140	0
Naphthalene	2.069	1.829	-	11.6	20	127	0
1,2,3-Trichlorobenzene	0.847	0.778	-	8.1	20	135	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : TUFTS STREET
 Instrument ID : VOA123
 Lab File ID : V23240220A01
 Sample No : WG1887347-2
 Channel :

Lab Number : L2408101
 Project Number : 045163
 Calibration Date : 02/20/24 08:43
 Init. Calib. Date(s) : 02/07/24 02/08/24
 Init. Calib. Times : 20:15 00:33

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	110	0
Dichlorodifluoromethane	0.309	0.151	-	51.1*	20	59	0
Chloromethane	0.428	0.293	-	31.5*	20	77	0
Vinyl chloride	40	32.022	-	19.9	20	100	0
Bromomethane	0.156	0.187	-	-19.9	20	140	0
Chloroethane	0.18	0.176	-	2.2	20	112	0
Trichlorofluoromethane	0.304	0.343	-	-12.8	20	135	0
Ethyl ether	0.14	0.124	-	11.4	20	98	0
1,1-Dichloroethene	0.224	0.246	-	-9.8	20	126	0
Carbon disulfide	0.855	0.83	-	2.9	20	115	0
Methylene chloride	0.302	0.288	-	4.6	20	108	0
Acetone	40	27.01	-	32.5*	20	78	0
trans-1,2-Dichloroethene	0.272	0.293	-	-7.7	20	121	0
Methyl tert-butyl ether	0.756	0.645	-	14.7	20	94	0
Diisopropyl ether	1.212	1.026	-	15.3	20	92	0
1,1-Dichloroethane	0.556	0.541	-	2.7	20	107	0
Ethyl tert-butyl ether	1.027	0.898	-	12.6	20	95	0
cis-1,2-Dichloroethene	0.318	0.323	-	-1.6	20	111	0
2,2-Dichloropropane	0.387	0.412	-	-6.5	20	120	0
Bromochloromethane	0.157	0.153	-	2.5	20	107	0
Chloroform	0.512	0.502	-	2	20	108	0
Carbon tetrachloride	40	40.218	-	-0.5	20	131	0
Tetrahydrofuran	0.098	0.057	-	41.8*	20	72	0
Dibromofluoromethane	0.262	0.251	-	4.2	20	106	0
1,1,1-Trichloroethane	0.397	0.45	-	-13.4	20	127	0
2-Butanone	0.133	0.082	-	38.3*	20	71	0
1,1-Dichloropropene	40	42.625	-	-6.6	20	127	0
Benzene	1.072	1.105	-	-3.1	20	113	0
tert-Amyl methyl ether	0.792	0.688	-	13.1	20	95	0
1,2-Dichloroethane-d4	0.27	0.226	-	16.3	20	94	0
1,2-Dichloroethane	0.394	0.339	-	14	20	94	0
Trichloroethene	0.28	0.309	-	-10.4	20	125	0
Dibromomethane	0.174	0.155	-	10.9	20	98	0
1,2-Dichloropropane	40	36.066	-	9.8	20	102	0
Bromodichloromethane	0.397	0.37	-	6.8	20	103	0
1,4-Dioxane	0.00235	0.0018*	-	23.4*	20	82	0
cis-1,3-Dichloropropene	0.451	0.431	-	4.4	20	100	0
Chlorobenzene-d5	1	1	-	0	20	113	0
Toluene-d8	1.396	1.279	-	8.4	20	103	0
Toluene	0.932	0.958	-	-2.8	20	118	0
4-Methyl-2-pentanone	0.138	0.096	-	30.4*	20	79	0
Tetrachloroethene	40	44.318	-	-10.8	20	145	0
trans-1,3-Dichloropropene	0.54	0.485	-	10.2	20	97	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : TUFTS STREET
 Instrument ID : VOA123
 Lab File ID : V23240220A01
 Sample No : WG1887347-2
 Channel :

Lab Number : L2408101
 Project Number : 045163
 Calibration Date : 02/20/24 08:43
 Init. Calib. Date(s) : 02/07/24 02/08/24
 Init. Calib. Times : 20:15 00:33

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,1,2-Trichloroethane	0.275	0.241	-	12.4	20	98	0
Chlorodibromomethane	0.395	0.379	-	4.1	20	104	0
1,3-Dichloropropane	0.545	0.481	-	11.7	20	98	0
1,2-Dibromoethane	0.319	0.293	-	8.2	20	99	0
2-Hexanone	0.252	0.16	-	36.5*	20	70	0
Chlorobenzene	1.067	1.103	-	-3.4	20	115	0
Ethylbenzene	1.731	1.809	-	-4.5	20	120	0
1,1,1,2-Tetrachloroethane	0.398	0.407	-	-2.3	20	111	0
p/m Xylene	0.662	0.726	-	-9.7	20	123	0
o Xylene	0.672	0.701	-	-4.3	20	117	0
Styrene	1.131	1.16	-	-2.6	20	111	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	118	0
Bromoform	0.48	0.417	-	13.1	20	99	0
Isopropylbenzene	3.164	3.336	-	-5.4	20	127	0
4-Bromofluorobenzene	0.931	0.808	-	13.2	20	102	0
Bromobenzene	0.906	0.896	-	1.1	20	115	0
n-Propylbenzene	3.676	3.809	-	-3.6	20	124	0
1,1,2,2-Tetrachloroethane	0.754	0.574	-	23.9*	20	89	0
2-Chlorotoluene	2.402	2.285	-	4.9	20	112	0
1,3,5-Trimethylbenzene	2.818	2.87	-	-1.8	20	122	0
1,2,3-Trichloropropane	0.583	0.442	-	24.2*	20	89	0
4-Chlorotoluene	2.419	2.368	-	2.1	20	115	0
tert-Butylbenzene	2.348	2.51	-	-6.9	20	129	0
1,2,4-Trimethylbenzene	2.842	2.822	-	0.7	20	118	0
sec-Butylbenzene	3.386	3.668	-	-8.3	20	131	0
p-Isopropyltoluene	3.043	3.301	-	-8.5	20	130	0
1,3-Dichlorobenzene	1.69	1.756	-	-3.9	20	122	0
1,4-Dichlorobenzene	1.71	1.758	-	-2.8	20	121	0
n-Butylbenzene	2.586	2.779	-	-7.5	20	131	0
1,2-Dichlorobenzene	1.614	1.609	-	0.3	20	116	0
1,2-Dibromo-3-chloropropan	0.129	0.095	-	26.4*	20	85	0
Hexachlorobutadiene	0.659	0.758	-	-15	20	146	0
1,2,4-Trichlorobenzene	1.16	1.263	-	-8.9	20	127	0
Naphthalene	2.342	2.227	-	4.9	20	109	0
1,2,3-Trichlorobenzene	1.043	1.076	-	-3.2	20	120	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : TUFTS STREET
 Instrument ID : VOA123
 Lab File ID : V23240221A02
 Sample No : WG1887734-2
 Channel :

Lab Number : L2408101
 Project Number : 045163
 Calibration Date : 02/21/24 08:39
 Init. Calib. Date(s) : 02/07/24 02/08/24
 Init. Calib. Times : 20:15 00:33

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	105	0
Dichlorodifluoromethane	0.309	0.127	-	58.9*	20	47	0
Chloromethane	0.428	0.282	-	34.1*	20	71	0
Vinyl chloride	40	30.093	-	24.8*	20	89	0
Bromomethane	0.156	0.169	-	-8.3	20	121	0
Chloroethane	0.18	0.171	-	5	20	103	0
Trichlorofluoromethane	0.304	0.321	-	-5.6	20	120	0
Ethyl ether	0.14	0.127	-	9.3	20	96	0
1,1-Dichloroethene	0.224	0.242	-	-8	20	118	0
Carbon disulfide	0.855	0.821	-	4	20	108	0
Freon-113	0.244	0.242	-	0.8	20	120	0
Acrolein	0.044	0.033	-	25*	20	84	0
Methylene chloride	0.302	0.291	-	3.6	20	104	0
Acetone	40	30.718	-	23.2*	20	83	0
trans-1,2-Dichloroethene	0.272	0.293	-	-7.7	20	115	0
Methyl acetate	0.2	0.145	-	27.5*	20	78	0
Methyl tert-butyl ether	0.756	0.667	-	11.8	20	93	0
tert-Butyl alcohol	0.029	0.02	-	31*	20	76	0
Diisopropyl ether	1.212	1.045	-	13.8	20	89	0
1,1-Dichloroethane	0.556	0.543	-	2.3	20	102	0
Halothane	0.203	0.23	-	-13.3	20	122	0
Acrylonitrile	0.09	0.068	-	24.4*	20	82	0
Ethyl tert-butyl ether	1.027	0.919	-	10.5	20	93	0
Vinyl acetate	0.698	0.603	-	13.6	20	86	0
cis-1,2-Dichloroethene	0.318	0.325	-	-2.2	20	107	0
2,2-Dichloropropane	0.387	0.405	-	-4.7	20	113	0
Bromochloromethane	0.157	0.154	-	1.9	20	103	0
Cyclohexane	0.505	0.476	-	5.7	20	113	0
Chloroform	0.512	0.505	-	1.4	20	104	0
Ethyl acetate	0.297	0.221	-	25.6*	20	78	0
Carbon tetrachloride	40	39.44	-	1.4	20	122	0
Tetrahydrofuran	0.098	0.062	-	36.7*	20	75	0
Dibromofluoromethane	0.262	0.252	-	3.8	20	101	0
1,1,1-Trichloroethane	0.397	0.443	-	-11.6	20	119	0
2-Butanone	0.133	0.09	-	32.3*	20	74	0
1,1-Dichloropropene	40	41.608	-	-4	20	118	0
Benzene	1.072	1.105	-	-3.1	20	107	0
tert-Amyl methyl ether	0.792	0.706	-	10.9	20	93	0
1,2-Dichloroethane-d4	0.27	0.226	-	16.3	20	89	0
1,2-Dichloroethane	0.394	0.347	-	11.9	20	92	0
Methyl cyclohexane	0.456	0.44	-	3.5	20	120	0
Trichloroethene	0.28	0.302	-	-7.9	20	116	0
Dibromomethane	0.174	0.16	-	8	20	96	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : TUFTS STREET
 Instrument ID : VOA123
 Lab File ID : V23240221A02
 Sample No : WG1887734-2
 Channel :

Lab Number : L2408101
 Project Number : 045163
 Calibration Date : 02/21/24 08:39
 Init. Calib. Date(s) : 02/07/24 02/08/24
 Init. Calib. Times : 20:15 00:33

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,2-Dichloropropane	40	36.624	-	8.4	20	98	0
Bromodichloromethane	0.397	0.382	-	3.8	20	101	0
1,4-Dioxane	0.00235	0.00213*	-	9.4	20	93	0
cis-1,3-Dichloropropene	0.451	0.438	-	2.9	20	97	0
Chlorobenzene-d5	1	1	-	0	20	109	0
Toluene-d8	1.396	1.265	-	9.4	20	99	0
Toluene	0.932	0.948	-	-1.7	20	113	0
4-Methyl-2-pentanone	0.138	0.101	-	26.8*	20	80	0
Tetrachloroethene	40	43.072	-	-7.7	20	136	0
trans-1,3-Dichloropropene	0.54	0.494	-	8.5	20	95	0
Ethyl methacrylate	0.412	0.338	-	18	20	88	0
1,1,2-Trichloroethane	0.275	0.247	-	10.2	20	97	0
Chlorodibromomethane	0.395	0.388	-	1.8	20	102	0
1,3-Dichloropropane	0.545	0.49	-	10.1	20	96	0
1,2-Dibromoethane	0.319	0.303	-	5	20	99	0
2-Hexanone	0.252	0.174	-	31*	20	73	0
Chlorobenzene	1.067	1.101	-	-3.2	20	111	0
Ethylbenzene	1.731	1.82	-	-5.1	20	117	0
1,1,1,2-Tetrachloroethane	0.398	0.414	-	-4	20	109	0
p/m Xylene	0.662	0.723	-	-9.2	20	118	0
o Xylene	0.672	0.701	-	-4.3	20	113	0
Styrene	1.131	1.144	-	-1.1	20	106	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	114	0
Bromoform	0.48	0.451	-	6	20	103	0
Isopropylbenzene	3.164	3.309	-	-4.6	20	122	0
4-Bromofluorobenzene	0.931	0.788	-	15.4	20	96	0
Bromobenzene	0.906	0.913	-	-0.8	20	113	0
n-Propylbenzene	3.676	3.856	-	-4.9	20	122	0
1,4-Dichlorobutane	1.133	0.895	-	21*	20	88	0
1,1,2,2-Tetrachloroethane	0.754	0.636	-	15.6	20	96	0
4-Ethyltoluene	3.23	3.405	-	-5.4	20	122	0
2-Chlorotoluene	2.402	2.275	-	5.3	20	108	0
1,3,5-Trimethylbenzene	2.818	2.899	-	-2.9	20	119	0
1,2,3-Trichloropropane	0.583	0.473	-	18.9	20	92	0
trans-1,4-Dichloro-2-buten	0.248	0.185	-	25.4*	20	84	0
4-Chlorotoluene	2.419	2.399	-	0.8	20	112	0
tert-Butylbenzene	2.348	2.504	-	-6.6	20	125	0
1,2,4-Trimethylbenzene	2.842	2.858	-	-0.6	20	115	0
sec-Butylbenzene	3.386	3.645	-	-7.6	20	126	0
p-Isopropyltoluene	3.043	3.318	-	-9	20	127	0
1,3-Dichlorobenzene	1.69	1.794	-	-6.2	20	121	0
1,4-Dichlorobenzene	1.71	1.787	-	-4.5	20	119	0
p-Diethylbenzene	1.89	2.073	-	-9.7	20	128	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : TUFTS STREET
 Instrument ID : VOA123
 Lab File ID : V23240221A02
 Sample No : WG1887734-2
 Channel :

Lab Number : L2408101
 Project Number : 045163
 Calibration Date : 02/21/24 08:39
 Init. Calib. Date(s) : 02/07/24 02/08/24
 Init. Calib. Times : 20:15 00:33

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
n-Butylbenzene	2.586	2.799	-	-8.2	20	128	0
1,2-Dichlorobenzene	1.614	1.655	-	-2.5	20	115	0
1,2,4,5-Tetramethylbenzene	3.095	3.243	-	-4.8	20	118	0
1,2-Dibromo-3-chloropropan	0.129	0.11	-	14.7	20	96	0
1,3,5-Trichlorobenzene	1.334	1.538	-	-15.3	20	133	0
Hexachlorobutadiene	0.659	0.762	-	-15.6	20	142	0
1,2,4-Trichlorobenzene	1.16	1.318	-	-13.6	20	129	0
Naphthalene	2.342	2.244	-	4.2	20	106	0
1,2,3-Trichlorobenzene	1.043	1.121	-	-7.5	20	121	0

* Value outside of QC limits.



ANALYTICAL REPORT

PREPARED FOR

Attn: Stephan Landry
Atlas Technical Consultants LLC
10 State St
Suite 100
Woburn, Massachusetts 01801

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JOB DESCRIPTION

Tufts Street Improvement - Somerville, M

JOB NUMBER

620-17450-1

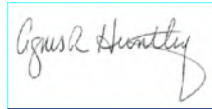
Eurofins New England

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



Authorized for release by
Agnes Huntley, Project Manager
Agnes.Huntley@et.eurofinsus.com
(401)372-3482

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Revision 1

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Definitions/Glossary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

MassDEP Analytical Protocol Certification Form

Laboratory Name: Eurofins New England

Project #: 620-17450-1

Project Location: Tufts Street Improvement - Somerville, M

RTN:

This Form provides certifications for the following data set: list Laboratory Sample ID Number(s):
620-17450-1 through 620-17450-18

 Matrices: ☒ Groundwater/Surface Water ☒ Soil/Sediment ☐ Drinking Water ☐ Air ☐ Other:

CAM Protocol (check all that apply below:)

8260 VOC CAM II A ☒	7470/7471 Hg CAM III B ☒	MassDEP VPH (GC/PID/FID) CAM IV A ☐	8082 PCB CAM V A ☒	9014 Total Cyanide/PAC CAM VI A ☐	6860 Perchlorate CAM VIII B ☐
8270 SVOC CAM II B ☒	7010 Metals CAM III C ☐	MassDEP VPH (GC/MS) CAM IV C ☐	8081 Pesticides CAM V B ☐	7196 Hex Cr CAM VI B ☐	MassDEP APH CAM IX A ☐
6010 Metals CAM III A ☒	6020 Metals CAM III D ☐	MassDEP EPH CAM IV B ☐	8151 Herbicides CAM V C ☐	8330 Explosives CAM VIII A ☐	TO-15 VOC CAM IX B ☐

Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	☒ Yes ☐ No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	☒ Yes ☐ No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	☒ Yes ☐ No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	☒ Yes ☐ No
E	VPH, EPH, APH, and TO-15 only a. VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	☐ Yes ☐ No ☐ Yes ☐ No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	☒ Yes ☐ No

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	☒ Yes ☐ No ¹
----------	---	--

Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.

H	Were all QC performance standards specified in the CAM protocol(s) achieved?	☐ Yes ☒ No ¹
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	☐ Yes ☒ No ¹

¹ All negative responses must be addressed in an attached laboratory narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, is accurate and complete.

 Signature: 

Position: Project Manager

Printed Name: Agnes Huntley

Date: 04/03/2024

Case Narrative

Client: Atlas Technical Consultants LLC
Project: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Job ID: 620-17450-1

Eurofins New England

Job Narrative 620-17450-1

REVISION

The report being provided is a revision of the original report sent on 3/28/2024. The report (revision 1) is being revised due to Report revised as client needed full list 8270 with low-level PAHs.

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 3/18/2024 3:25 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.4°C.

GC/MS VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC/MS Semi VOA

Method 8270MCP: The following analytes have been identified, in the reference method and/or via historical data, to be poor and/or erratic performers: Benzidine and Benzoic acid. These analytes may have a %D >50%.

Method 8270MCP: The laboratory control sample (LCS) for preparation batch 620-32927 and analytical batch 620-32951 recovered outside control limits for the following analytes: 4-Chloroaniline, Aniline, Benzidine, Benzoic acid and Pyridine. The affected target analytes recovered within acceptance limits, >10%, per MCP criteria therefore, demonstrates the analytical system had sufficient sensitivity to detect the compounds had they been present. Since the affected target compounds were not detected in the samples, the data have been reported and qualified.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC Semi VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

PCBs

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals

Method 6010MCP: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 620-33090 and analytical batch 620-33178 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 6010MCP: The sample duplicate (DUP) precision for preparation batch 620-33090 and analytical batch 620-33178 was outside control limits. Sample non-homogeneity is suspected.

Method 6010MCP: The matrix spike / matrix spike duplicate / sample duplicate (MS/MSD/DUP) precision for preparation batch 620-33090 and analytical batch 620-33178 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) precision was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins New England

Case Narrative

Client: Atlas Technical Consultants LLC
Project: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Job ID: 620-17450-1 (Continued)

Eurofins New England

General Chemistry

Method 1010A: The Pensky Martens closed cup apparatus is designed to determine the flash point of a liquid sample. The sample submitted could not be mixed well enough to obtain uniform heating. The temperature being measured was that of the material near the top of the cup. The material at the bottom of the cup could have a higher temperature. The temperature reported may not be accurate.

Method Moisture: The sample duplicate (DUP) precision for analytical batch 620-32837 was outside control limits. Sample non-homogeneity is suspected.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins New England

Detection Summary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-3 (0-5)

Lab Sample ID: 620-17450-1

No Detections.

Client Sample ID: ATC-3 (5-10)

Lab Sample ID: 620-17450-2

No Detections.

Client Sample ID: ATC-2 (0-5)

Lab Sample ID: 620-17450-3

No Detections.

Client Sample ID: ATC-2 (5-10)

Lab Sample ID: 620-17450-4

No Detections.

Client Sample ID: ATC-1 (0-5)

Lab Sample ID: 620-17450-5

No Detections.

Client Sample ID: ATC-1 (5-10)

Lab Sample ID: 620-17450-6

No Detections.

Client Sample ID: Comp (0-5)

Lab Sample ID: 620-17450-7

Analyte	Result	Qualifier	RL	Unit	Dil	Fac	D	Method	Prep Type
Acenaphthylene	28.7		17.8	ug/Kg	1	✖		8270D_LL_PAH	Total/NA
Anthracene	33.8		17.8	ug/Kg	1	✖		8270D_LL_PAH	Total/NA
Benzo[a]anthracene	148		17.8	ug/Kg	1	✖		8270D_LL_PAH	Total/NA
Benzo[a]pyrene	175		17.8	ug/Kg	1	✖		8270D_LL_PAH	Total/NA
Benzo[b]fluoranthene	179		17.8	ug/Kg	1	✖		8270D_LL_PAH	Total/NA
Benzo[g,h,i]perylene	136		17.8	ug/Kg	1	✖		8270D_LL_PAH	Total/NA
Benzo[k]fluoranthene	165		17.8	ug/Kg	1	✖		8270D_LL_PAH	Total/NA
Chrysene	156		17.8	ug/Kg	1	✖		8270D_LL_PAH	Total/NA
Dibenz(a,h)anthracene	41.0		17.8	ug/Kg	1	✖		8270D_LL_PAH	Total/NA
Fluoranthene	256		17.8	ug/Kg	1	✖		8270D_LL_PAH	Total/NA
Indeno[1,2,3-cd]pyrene	112		17.8	ug/Kg	1	✖		8270D_LL_PAH	Total/NA
Phenanthrene	102		17.8	ug/Kg	1	✖		8270D_LL_PAH	Total/NA
Pyrene	259		17.8	ug/Kg	1	✖		8270D_LL_PAH	Total/NA
Bis(2-ethylhexyl) phthalate	50.8		17.8	ug/Kg	1	✖		8270D_LL_PAH	Total/NA
TEPH (C9-C36)	90.2		15.2	mg/Kg	1	✖		8100	Total/NA
Barium	45.9		2.10	mg/Kg	2	✖		6010D	Total/NA
Chromium	13.6	F1	2.10	mg/Kg	2	✖		6010D	Total/NA
Lead	21.0		3.15	mg/Kg	2	✖		6010D	Total/NA
Flashpoint	>184		50.0	Degrees F	1			1010A	Total/NA
Total Organic Carbon	4780	F1	300	mg/Kg	1			9060	Total/NA
pH	8.4			SU	1			9045D	Soluble
Temperature	23.4			Degrees C	1			9045D	Soluble
Specific Conductance	1200		10.0	uS/cm	1			SM 2510B	Soluble

Client Sample ID: Comp (5-10)

Lab Sample ID: 620-17450-8

Analyte	Result	Qualifier	RL	Unit	Dil	Fac	D	Method	Prep Type
TEPH (C9-C36)	16.7		14.9	mg/Kg	1	✖		8100	Total/NA
Arsenic	3.60		2.88	mg/Kg	2	✖		6010D	Total/NA
Barium	39.3		1.92	mg/Kg	2	✖		6010D	Total/NA
Chromium	17.4		1.92	mg/Kg	2	✖		6010D	Total/NA
Lead	5.34		2.88	mg/Kg	2	✖		6010D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins New England

Detection Summary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: Comp (5-10) (Continued)

Lab Sample ID: 620-17450-8

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Flashpoint	>170		50.0	Degrees F	1		1010A	Total/NA
Total Organic Carbon	1620		300	mg/Kg	1		9060	Total/NA
pH	7.9			SU	1		9045D	Soluble
Temperature	23.4			Degrees C	1		9045D	Soluble
Specific Conductance	601		10.0	uS/cm	1		SM 2510B	Soluble

Client Sample ID: ATC-8 (0-5)

Lab Sample ID: 620-17450-9

No Detections.

Client Sample ID: ATC-8 (5-10)

Lab Sample ID: 620-17450-10

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	13.4		4.94	ug/Kg	1	✱	8260C	Total/NA

Client Sample ID: ATC-7 (0-5)

Lab Sample ID: 620-17450-11

No Detections.

Client Sample ID: ATC-7 (5-10)

Lab Sample ID: 620-17450-12

No Detections.

Client Sample ID: ATC-6 (0-5)

Lab Sample ID: 620-17450-13

No Detections.

Client Sample ID: ATC-6 (5-10)

Lab Sample ID: 620-17450-14

No Detections.

Client Sample ID: ATC-4 (0-5)

Lab Sample ID: 620-17450-15

No Detections.

Client Sample ID: ATC-4 (5-10)

Lab Sample ID: 620-17450-16

No Detections.

Client Sample ID: ATC-5 (0-5)

Lab Sample ID: 620-17450-17

No Detections.

Client Sample ID: ATC-5 (5-10)

Lab Sample ID: 620-17450-18

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-3 (0-5)

Lab Sample ID: 620-17450-1

Date Collected: 03/15/24 09:10

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 88.2

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Acetone	ND		98.4	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Acrylonitrile	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Benzene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Bromobenzene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Bromochloromethane	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Bromodichloromethane	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Bromoform	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Bromomethane	ND		19.7	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
2-Butanone (MEK)	ND		19.7	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
n-Butylbenzene	ND		19.7	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
sec-Butylbenzene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
tert-Butylbenzene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Carbon disulfide	ND		19.7	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Carbon tetrachloride	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Chlorobenzene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Chloroethane	ND		19.7	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Chloroform	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Chloromethane	ND		19.7	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
2-Chlorotoluene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
4-Chlorotoluene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
1,2-Dibromo-3-Chloropropane	ND		19.7	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Dibromochloromethane	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
1,2-Dibromoethane (EDB)	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Dibromomethane	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
1,2-Dichlorobenzene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
1,3-Dichlorobenzene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
1,4-Dichlorobenzene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Dichlorodifluoromethane (Freon 12)	ND		19.7	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
1,1-Dichloroethane	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
1,2-Dichloroethane	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
1,1-Dichloroethene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
cis-1,2-Dichloroethene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
trans-1,2-Dichloroethene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
1,2-Dichloropropane	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
1,3-Dichloropropane	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
2,2-Dichloropropane	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
1,1-Dichloropropene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
cis-1,3-Dichloropropene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
trans-1,3-Dichloropropene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Ethylbenzene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Hexachlorobutadiene	ND		19.7	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
2-Hexanone (MBK)	ND		19.7	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Isopropylbenzene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
4-Isopropyltoluene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Methyl tert-butyl ether	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
4-Methyl-2-pentanone (MIBK)	ND		19.7	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Methylene Chloride	ND		19.7	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Naphthalene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1

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Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-3 (0-5)

Lab Sample ID: 620-17450-1

Date Collected: 03/15/24 09:10

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 88.2

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
Styrene	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
1,1,1,2-Tetrachloroethane	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
1,1,2,2-Tetrachloroethane	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
Tetrachloroethene	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
Toluene	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
1,2,3-Trichlorobenzene	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
1,2,4-Trichlorobenzene	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
1,3,5-Trichlorobenzene	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
1,1,1-Trichloroethane	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
1,1,2-Trichloroethane	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
Trichloroethene	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
Trichlorofluoromethane (Freon 11)	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
1,2,3-Trichloropropane	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
1,2,4-Trimethylbenzene	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
1,3,5-Trimethylbenzene	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
Vinyl chloride	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
m,p-Xylene	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
o-Xylene	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
Tetrahydrofuran	ND		19.7	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
Ethyl ether	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
Tert-amyl methyl ether	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
Ethyl tert-butyl ether	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
di-Isopropyl ether	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
tert-Butanol	ND		197	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
1,4-Dioxane	ND		197	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
trans-1,4-Dichloro-2-butene	ND		49.2	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
Ethanol	ND		1970	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
1,3-Dichloropropene, Total	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
Xylenes, Total	ND		29.5	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	03/26/24 07:37	03/26/24 12:08	1
Toluene-d8 (Surr)	97		70 - 130	03/26/24 07:37	03/26/24 12:08	1
1,2-Dichloroethane-d4 (Surr)	99		70 - 130	03/26/24 07:37	03/26/24 12:08	1
Dibromofluoromethane (Surr)	97		70 - 130	03/26/24 07:37	03/26/24 12:08	1

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-3 (5-10)

Lab Sample ID: 620-17450-2

Date Collected: 03/15/24 09:30

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 87.3

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Acetone	ND		51.6	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Acrylonitrile	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Benzene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Bromobenzene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Bromochloromethane	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Bromodichloromethane	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Bromoform	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Bromomethane	ND		10.3	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
2-Butanone (MEK)	ND		10.3	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
n-Butylbenzene	ND		10.3	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
sec-Butylbenzene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
tert-Butylbenzene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Carbon disulfide	ND		10.3	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Carbon tetrachloride	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Chlorobenzene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Chloroethane	ND		10.3	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Chloroform	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Chloromethane	ND		10.3	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
2-Chlorotoluene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
4-Chlorotoluene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
1,2-Dibromo-3-Chloropropane	ND		10.3	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Dibromochloromethane	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
1,2-Dibromoethane (EDB)	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Dibromomethane	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
1,2-Dichlorobenzene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
1,3-Dichlorobenzene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
1,4-Dichlorobenzene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Dichlorodifluoromethane (Freon 12)	ND		10.3	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
1,1-Dichloroethane	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
1,2-Dichloroethane	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
1,1-Dichloroethene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
cis-1,2-Dichloroethene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
trans-1,2-Dichloroethene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
1,2-Dichloropropane	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
1,3-Dichloropropane	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
2,2-Dichloropropane	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
1,1-Dichloropropene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
cis-1,3-Dichloropropene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
trans-1,3-Dichloropropene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Ethylbenzene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Hexachlorobutadiene	ND		10.3	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
2-Hexanone (MBK)	ND		10.3	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Isopropylbenzene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
4-Isopropyltoluene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Methyl tert-butyl ether	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
4-Methyl-2-pentanone (MIBK)	ND		10.3	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Methylene Chloride	ND		10.3	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Naphthalene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1

Euofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-3 (5-10)

Lab Sample ID: 620-17450-2

Date Collected: 03/15/24 09:30

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 87.3

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
Styrene	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
1,1,1,2-Tetrachloroethane	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
1,1,2,2-Tetrachloroethane	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
Tetrachloroethene	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
Toluene	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
1,2,3-Trichlorobenzene	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
1,2,4-Trichlorobenzene	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
1,3,5-Trichlorobenzene	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
1,1,1-Trichloroethane	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
1,1,2-Trichloroethane	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
Trichloroethene	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
Trichlorofluoromethane (Freon 11)	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
1,2,3-Trichloropropane	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
1,2,4-Trimethylbenzene	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
1,3,5-Trimethylbenzene	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
Vinyl chloride	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
m,p-Xylene	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
o-Xylene	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
Tetrahydrofuran	ND		10.3	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
Ethyl ether	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
Tert-amyl methyl ether	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
Ethyl tert-butyl ether	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
di-Isopropyl ether	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
tert-Butanol	ND		103	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
1,4-Dioxane	ND		103	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
trans-1,4-Dichloro-2-butene	ND		25.8	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
Ethanol	ND		1030	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
1,3-Dichloropropene, Total	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
Xylenes, Total	ND		15.5	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	03/26/24 07:37	03/26/24 12:33	1
Toluene-d8 (Surr)	98		70 - 130	03/26/24 07:37	03/26/24 12:33	1
1,2-Dichloroethane-d4 (Surr)	100		70 - 130	03/26/24 07:37	03/26/24 12:33	1
Dibromofluoromethane (Surr)	100		70 - 130	03/26/24 07:37	03/26/24 12:33	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-2 (0-5)

Lab Sample ID: 620-17450-3

Date Collected: 03/15/24 10:15

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 90.6

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Acetone	ND		54.6	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Acrylonitrile	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Benzene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Bromobenzene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Bromochloromethane	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Bromodichloromethane	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Bromoform	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Bromomethane	ND		10.9	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
2-Butanone (MEK)	ND		10.9	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
n-Butylbenzene	ND		10.9	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
sec-Butylbenzene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
tert-Butylbenzene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Carbon disulfide	ND		10.9	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Carbon tetrachloride	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Chlorobenzene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Chloroethane	ND		10.9	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Chloroform	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Chloromethane	ND		10.9	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
2-Chlorotoluene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
4-Chlorotoluene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
1,2-Dibromo-3-Chloropropane	ND		10.9	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Dibromochloromethane	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
1,2-Dibromoethane (EDB)	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Dibromomethane	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
1,2-Dichlorobenzene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
1,3-Dichlorobenzene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
1,4-Dichlorobenzene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Dichlorodifluoromethane (Freon 12)	ND		10.9	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
1,1-Dichloroethane	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
1,2-Dichloroethane	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
1,1-Dichloroethene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
cis-1,2-Dichloroethene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
trans-1,2-Dichloroethene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
1,2-Dichloropropane	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
1,3-Dichloropropane	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
2,2-Dichloropropane	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
1,1-Dichloropropene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
cis-1,3-Dichloropropene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
trans-1,3-Dichloropropene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Ethylbenzene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Hexachlorobutadiene	ND		10.9	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
2-Hexanone (MBK)	ND		10.9	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Isopropylbenzene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
4-Isopropyltoluene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Methyl tert-butyl ether	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
4-Methyl-2-pentanone (MIBK)	ND		10.9	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Methylene Chloride	ND		10.9	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Naphthalene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1

Euofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-2 (0-5)

Lab Sample ID: 620-17450-3

Date Collected: 03/15/24 10:15

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 90.6

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
Styrene	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
1,1,1,2-Tetrachloroethane	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
1,1,2,2-Tetrachloroethane	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
Tetrachloroethene	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
Toluene	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
1,2,3-Trichlorobenzene	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
1,2,4-Trichlorobenzene	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
1,3,5-Trichlorobenzene	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
1,1,1-Trichloroethane	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
1,1,2-Trichloroethane	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
Trichloroethene	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
Trichlorofluoromethane (Freon 11)	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
1,2,3-Trichloropropane	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
1,2,4-Trimethylbenzene	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
1,3,5-Trimethylbenzene	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
Vinyl chloride	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
m,p-Xylene	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
o-Xylene	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
Tetrahydrofuran	ND		10.9	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
Ethyl ether	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
Tert-amyl methyl ether	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
Ethyl tert-butyl ether	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
di-Isopropyl ether	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
tert-Butanol	ND		109	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
1,4-Dioxane	ND		109	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
trans-1,4-Dichloro-2-butene	ND		27.3	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
Ethanol	ND		1090	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
1,3-Dichloropropene, Total	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
Xylenes, Total	ND		16.4	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	03/26/24 07:37	03/26/24 12:58	1
Toluene-d8 (Surr)	97		70 - 130	03/26/24 07:37	03/26/24 12:58	1
1,2-Dichloroethane-d4 (Surr)	100		70 - 130	03/26/24 07:37	03/26/24 12:58	1
Dibromofluoromethane (Surr)	100		70 - 130	03/26/24 07:37	03/26/24 12:58	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-2 (5-10)

Lab Sample ID: 620-17450-4

Date Collected: 03/15/24 11:00

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 77.8

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Acetone	ND		64.1	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Acrylonitrile	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Benzene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Bromobenzene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Bromochloromethane	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Bromodichloromethane	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Bromoform	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Bromomethane	ND		12.8	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
2-Butanone (MEK)	ND		12.8	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
n-Butylbenzene	ND		12.8	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
sec-Butylbenzene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
tert-Butylbenzene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Carbon disulfide	ND		12.8	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Carbon tetrachloride	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Chlorobenzene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Chloroethane	ND		12.8	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Chloroform	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Chloromethane	ND		12.8	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
2-Chlorotoluene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
4-Chlorotoluene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
1,2-Dibromo-3-Chloropropane	ND		12.8	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Dibromochloromethane	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
1,2-Dibromoethane (EDB)	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Dibromomethane	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
1,2-Dichlorobenzene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
1,3-Dichlorobenzene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
1,4-Dichlorobenzene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Dichlorodifluoromethane (Freon 12)	ND		12.8	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
1,1-Dichloroethane	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
1,2-Dichloroethane	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
1,1-Dichloroethene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
cis-1,2-Dichloroethene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
trans-1,2-Dichloroethene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
1,2-Dichloropropane	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
1,3-Dichloropropane	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
2,2-Dichloropropane	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
1,1-Dichloropropene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
cis-1,3-Dichloropropene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
trans-1,3-Dichloropropene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Ethylbenzene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Hexachlorobutadiene	ND		12.8	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
2-Hexanone (MBK)	ND		12.8	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Isopropylbenzene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
4-Isopropyltoluene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Methyl tert-butyl ether	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
4-Methyl-2-pentanone (MIBK)	ND		12.8	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Methylene Chloride	ND		12.8	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Naphthalene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1

Euofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-2 (5-10)

Lab Sample ID: 620-17450-4

Date Collected: 03/15/24 11:00

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 77.8

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
Styrene	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
1,1,1,2-Tetrachloroethane	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
1,1,2,2-Tetrachloroethane	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
Tetrachloroethene	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
Toluene	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
1,2,3-Trichlorobenzene	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
1,2,4-Trichlorobenzene	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
1,3,5-Trichlorobenzene	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
1,1,1-Trichloroethane	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
1,1,2-Trichloroethane	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
Trichloroethene	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
Trichlorofluoromethane (Freon 11)	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
1,2,3-Trichloropropane	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
1,2,4-Trimethylbenzene	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
1,3,5-Trimethylbenzene	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
Vinyl chloride	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
m,p-Xylene	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
o-Xylene	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
Tetrahydrofuran	ND		12.8	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
Ethyl ether	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
Tert-amyl methyl ether	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
Ethyl tert-butyl ether	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
di-Isopropyl ether	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
tert-Butanol	ND		128	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
1,4-Dioxane	ND		128	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
trans-1,4-Dichloro-2-butene	ND		32.1	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
Ethanol	ND		1280	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
1,3-Dichloropropene, Total	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
Xylenes, Total	ND		19.2	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	03/26/24 07:37	03/26/24 13:23	1
Toluene-d8 (Surr)	99		70 - 130	03/26/24 07:37	03/26/24 13:23	1
1,2-Dichloroethane-d4 (Surr)	113		70 - 130	03/26/24 07:37	03/26/24 13:23	1
Dibromofluoromethane (Surr)	105		70 - 130	03/26/24 07:37	03/26/24 13:23	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-1 (0-5)

Lab Sample ID: 620-17450-5

Date Collected: 03/15/24 11:20

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 88.8

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Acetone	ND		46.9	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Acrylonitrile	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Benzene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Bromobenzene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Bromochloromethane	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Bromodichloromethane	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Bromoform	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Bromomethane	ND		9.38	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
2-Butanone (MEK)	ND		9.38	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
n-Butylbenzene	ND		9.38	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
sec-Butylbenzene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
tert-Butylbenzene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Carbon disulfide	ND		9.38	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Carbon tetrachloride	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Chlorobenzene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Chloroethane	ND		9.38	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Chloroform	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Chloromethane	ND		9.38	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
2-Chlorotoluene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
4-Chlorotoluene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
1,2-Dibromo-3-Chloropropane	ND		9.38	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Dibromochloromethane	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
1,2-Dibromoethane (EDB)	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Dibromomethane	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
1,2-Dichlorobenzene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
1,3-Dichlorobenzene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
1,4-Dichlorobenzene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Dichlorodifluoromethane (Freon 12)	ND		9.38	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
1,1-Dichloroethane	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
1,2-Dichloroethane	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
1,1-Dichloroethene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
cis-1,2-Dichloroethene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
trans-1,2-Dichloroethene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
1,2-Dichloropropane	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
1,3-Dichloropropane	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
2,2-Dichloropropane	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
1,1-Dichloropropene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
cis-1,3-Dichloropropene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
trans-1,3-Dichloropropene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Ethylbenzene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Hexachlorobutadiene	ND		9.38	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
2-Hexanone (MBK)	ND		9.38	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Isopropylbenzene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
4-Isopropyltoluene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Methyl tert-butyl ether	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
4-Methyl-2-pentanone (MIBK)	ND		9.38	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Methylene Chloride	ND		9.38	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Naphthalene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1

Euofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-1 (0-5)

Lab Sample ID: 620-17450-5

Date Collected: 03/15/24 11:20

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 88.8

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
Styrene	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
1,1,1,2-Tetrachloroethane	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
1,1,2,2-Tetrachloroethane	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
Tetrachloroethene	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
Toluene	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
1,2,3-Trichlorobenzene	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
1,2,4-Trichlorobenzene	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
1,3,5-Trichlorobenzene	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
1,1,1-Trichloroethane	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
1,1,2-Trichloroethane	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
Trichloroethene	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
Trichlorofluoromethane (Freon 11)	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
1,2,3-Trichloropropane	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
1,2,4-Trimethylbenzene	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
1,3,5-Trimethylbenzene	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
Vinyl chloride	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
m,p-Xylene	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
o-Xylene	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
Tetrahydrofuran	ND		9.38	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
Ethyl ether	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
Tert-amyl methyl ether	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
Ethyl tert-butyl ether	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
di-Isopropyl ether	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
tert-Butanol	ND		93.8	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
1,4-Dioxane	ND		93.8	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
trans-1,4-Dichloro-2-butene	ND		23.5	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
Ethanol	ND		938	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
1,3-Dichloropropene, Total	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
Xylenes, Total	ND		14.1	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	03/26/24 07:37	03/26/24 13:49	1
Toluene-d8 (Surr)	99		70 - 130	03/26/24 07:37	03/26/24 13:49	1
1,2-Dichloroethane-d4 (Surr)	101		70 - 130	03/26/24 07:37	03/26/24 13:49	1
Dibromofluoromethane (Surr)	100		70 - 130	03/26/24 07:37	03/26/24 13:49	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-1 (5-10)

Lab Sample ID: 620-17450-6

Date Collected: 03/15/24 11:30

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 91.4

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Acetone	ND		53.2	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Acrylonitrile	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Benzene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Bromobenzene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Bromochloromethane	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Bromodichloromethane	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Bromoform	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Bromomethane	ND		10.6	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
2-Butanone (MEK)	ND		10.6	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
n-Butylbenzene	ND		10.6	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
sec-Butylbenzene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
tert-Butylbenzene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Carbon disulfide	ND		10.6	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Carbon tetrachloride	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Chlorobenzene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Chloroethane	ND		10.6	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Chloroform	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Chloromethane	ND		10.6	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
2-Chlorotoluene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
4-Chlorotoluene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
1,2-Dibromo-3-Chloropropane	ND		10.6	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Dibromochloromethane	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
1,2-Dibromoethane (EDB)	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Dibromomethane	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
1,2-Dichlorobenzene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
1,3-Dichlorobenzene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
1,4-Dichlorobenzene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Dichlorodifluoromethane (Freon 12)	ND		10.6	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
1,1-Dichloroethane	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
1,2-Dichloroethane	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
1,1-Dichloroethene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
cis-1,2-Dichloroethene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
trans-1,2-Dichloroethene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
1,2-Dichloropropane	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
1,3-Dichloropropane	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
2,2-Dichloropropane	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
1,1-Dichloropropene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
cis-1,3-Dichloropropene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
trans-1,3-Dichloropropene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Ethylbenzene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Hexachlorobutadiene	ND		10.6	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
2-Hexanone (MBK)	ND		10.6	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Isopropylbenzene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
4-Isopropyltoluene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Methyl tert-butyl ether	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
4-Methyl-2-pentanone (MIBK)	ND		10.6	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Methylene Chloride	ND		10.6	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Naphthalene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1

Euofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-1 (5-10)

Lab Sample ID: 620-17450-6

Date Collected: 03/15/24 11:30

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 91.4

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
Styrene	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
1,1,1,2-Tetrachloroethane	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
1,1,2,2-Tetrachloroethane	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
Tetrachloroethene	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
Toluene	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
1,2,3-Trichlorobenzene	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
1,2,4-Trichlorobenzene	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
1,3,5-Trichlorobenzene	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
1,1,1-Trichloroethane	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
1,1,2-Trichloroethane	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
Trichloroethene	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
Trichlorofluoromethane (Freon 11)	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
1,2,3-Trichloropropane	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
1,2,4-Trimethylbenzene	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
1,3,5-Trimethylbenzene	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
Vinyl chloride	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
m,p-Xylene	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
o-Xylene	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
Tetrahydrofuran	ND		10.6	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
Ethyl ether	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
Tert-amyl methyl ether	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
Ethyl tert-butyl ether	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
di-Isopropyl ether	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
tert-Butanol	ND		106	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
1,4-Dioxane	ND		106	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
trans-1,4-Dichloro-2-butene	ND		26.6	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
Ethanol	ND		1060	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
1,3-Dichloropropene, Total	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
Xylenes, Total	ND		16.0	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	03/26/24 07:37	03/26/24 14:14	1
Toluene-d8 (Surr)	99		70 - 130	03/26/24 07:37	03/26/24 14:14	1
1,2-Dichloroethane-d4 (Surr)	101		70 - 130	03/26/24 07:37	03/26/24 14:14	1
Dibromofluoromethane (Surr)	101		70 - 130	03/26/24 07:37	03/26/24 14:14	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: Comp (0-5)

Lab Sample ID: 620-17450-7

Date Collected: 03/15/24 12:00

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 87.7

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Acenaphthylene	28.7		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
1-Methylnaphthalene	ND		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Anthracene	33.8		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Benzo[a]anthracene	148		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Benzo[a]pyrene	175		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Benzo[b]fluoranthene	179		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Benzo[g,h,i]perylene	136		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Benzo[k]fluoranthene	165		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Chrysene	156		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Dibenz(a,h)anthracene	41.0		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Fluoranthene	256		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Fluorene	ND		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Indeno[1,2,3-cd]pyrene	112		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
2-Methylnaphthalene	ND		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Naphthalene	ND		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Phenanthrene	102		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Pyrene	259		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Bis(2-ethylhexyl) phthalate	50.8		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	43		30 - 130	03/21/24 08:36	03/21/24 15:49	1
Terphenyl-d14 (Surr)	76		30 - 130	03/21/24 08:36	03/21/24 15:49	1
2-Fluorobiphenyl (Surr)	51		30 - 130	03/21/24 08:36	03/21/24 15:49	1

Method: MA DEP 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
1,2,4-Trichlorobenzene	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
1,2-Dichlorobenzene	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
1,3-Dichlorobenzene	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
1,4-Dichlorobenzene	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
2,4,5-Trichlorophenol	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
2,4,6-Trichlorophenol	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
2,4-Dichlorophenol	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
2,4-Dimethylphenol	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
2,4-Dinitrophenol	ND		733	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
2,4-Dinitrotoluene	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
2,6-Dinitrotoluene	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
2-Chloronaphthalene	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
2-Chlorophenol	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
2-Methylphenol	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
2-Nitroaniline	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
2-Nitrophenol	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
3 & 4 Methylphenol	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
3,3'-Dichlorobenzidine	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
3-Nitroaniline	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
4,6-Dinitro-2-methylphenol	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
4-Bromophenyl phenyl ether	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
4-Chloro-3-methylphenol	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: Comp (0-5)

Lab Sample ID: 620-17450-7

Date Collected: 03/15/24 12:00

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 87.7

Method: MA DEP 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chloroaniline	ND	*-	185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
4-Chlorophenyl phenyl ether	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
4-Nitroaniline	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
4-Nitrophenol	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Acetophenone	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Aniline	ND	*-	366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Azobenzene/Diphenyldiazene	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Benzidine	ND	*-	733	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Benzoic acid	ND	*-	740	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Benzyl alcohol	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Bis(2-chloroethoxy)methane	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Bis(2-chloroethyl)ether	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
bis (2-chloroisopropyl) ether	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Bis(2-ethylhexyl) phthalate	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Butyl benzyl phthalate	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Carbazole	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Dibenzofuran	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Diethyl phthalate	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Dimethyl phthalate	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Di-n-butyl phthalate	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Di-n-octyl phthalate	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Hexachlorobenzene	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Hexachlorobutadiene	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Hexachlorocyclopentadiene	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Hexachloroethane	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Isophorone	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Nitrobenzene	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
N-Nitrosodimethylamine	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
N-Nitrosodi-n-propylamine	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
N-Nitrosodiphenylamine	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Pentachloronitrobenzene	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Pentachlorophenol	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Phenol	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Pyridine	ND	*-	366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	50		30 - 130	03/21/24 08:36	03/21/24 15:49	1
2-Fluorophenol (Surr)	50		15 - 110	03/21/24 08:36	03/21/24 15:49	1
Nitrobenzene-d5 (Surr)	39		30 - 130	03/21/24 08:36	03/21/24 15:49	1
Phenol-d5 (Surr)	54		15 - 110	03/21/24 08:36	03/21/24 15:49	1
2,4,6-Tribromophenol (Surr)	63		15 - 110	03/21/24 08:36	03/21/24 15:49	1
Terphenyl-d14 (Surr)	76		30 - 130	03/21/24 08:36	03/21/24 15:49	1

Method: MA DEP 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		21.9	ug/Kg	☆	03/19/24 14:48	03/21/24 23:56	1
PCB-1221	ND		21.9	ug/Kg	☆	03/19/24 14:48	03/21/24 23:56	1
PCB-1232	ND		21.9	ug/Kg	☆	03/19/24 14:48	03/21/24 23:56	1
PCB-1242	ND		21.9	ug/Kg	☆	03/19/24 14:48	03/21/24 23:56	1
PCB-1248	ND		21.9	ug/Kg	☆	03/19/24 14:48	03/21/24 23:56	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: Comp (0-5)

Lab Sample ID: 620-17450-7

Date Collected: 03/15/24 12:00

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 87.7

Method: MA DEP 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1254	ND		21.9	ug/Kg	☆	03/19/24 14:48	03/21/24 23:56	1
PCB-1262	ND		21.9	ug/Kg	☆	03/19/24 14:48	03/21/24 23:56	1
PCB-1260	ND		21.9	ug/Kg	☆	03/19/24 14:48	03/21/24 23:56	1
PCB-1268	ND		21.9	ug/Kg	☆	03/19/24 14:48	03/21/24 23:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	73		30 - 150			03/19/24 14:48	03/21/24 23:56	1
DCB Decachlorobiphenyl (Surr)	88		30 - 150			03/19/24 14:48	03/21/24 23:56	1

Method: SW846 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TEPH (C9-C36)	90.2		15.2	mg/Kg	☆	03/19/24 17:07	03/21/24 15:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctadecane (Surr)	100		40 - 140			03/19/24 17:07	03/21/24 15:35	1
o-Terphenyl (Surr)	72		40 - 140			03/19/24 17:07	03/21/24 15:35	1

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND	F1	3.15	mg/Kg	☆	03/26/24 08:24	03/27/24 14:54	2
Barium	45.9		2.10	mg/Kg	☆	03/26/24 08:24	03/27/24 14:54	2
Cadmium	ND		1.05	mg/Kg	☆	03/26/24 08:24	03/27/24 14:54	2
Chromium	13.6	F1	2.10	mg/Kg	☆	03/26/24 08:24	03/27/24 14:54	2
Lead	21.0		3.15	mg/Kg	☆	03/26/24 08:24	03/27/24 14:54	2
Selenium	ND	F1	3.15	mg/Kg	☆	03/26/24 08:24	03/27/24 14:54	2
Silver	ND	F1	3.15	mg/Kg	☆	03/26/24 08:24	03/27/24 14:54	2

Method: SW846 6010D - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0150	mg/L		03/26/24 15:40	03/27/24 13:47	1

Method: SW846 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0530	mg/Kg	☆	03/19/24 11:28	03/19/24 15:44	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Flashpoint (SW846 1010A)	>184		50.0	Degrees F			03/21/24 10:01	1
Cyanide, Reactive (SW846 9012)	ND		57.7	mg/Kg		03/25/24 08:25	03/25/24 17:06	1
Sulfide, Reactive (SW846 9034)	ND		154	mg/Kg		03/25/24 08:25	03/25/24 12:45	1
Total Organic Carbon (SW846 9060)	4780	F1	300	mg/Kg			03/21/24 13:08	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SW846 9045D)	8.4			SU			03/28/24 11:32	1
Temperature (SW846 9045D)	23.4			Degrees C			03/28/24 11:32	1
Specific Conductance (SM 2510B)	1200		10.0	uS/cm			03/28/24 11:04	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: Comp (5-10)

Lab Sample ID: 620-17450-8

Date Collected: 03/15/24 12:15

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 87.4

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Acenaphthylene	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
1-Methylnaphthalene	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Anthracene	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Benzo[a]anthracene	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Benzo[a]pyrene	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Benzo[b]fluoranthene	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Benzo[g,h,i]perylene	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Benzo[k]fluoranthene	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Chrysene	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Dibenz(a,h)anthracene	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Fluoranthene	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Fluorene	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Indeno[1,2,3-cd]pyrene	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
2-Methylnaphthalene	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Naphthalene	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Phenanthrene	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Pyrene	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Bis(2-ethylhexyl) phthalate	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	46		30 - 130	03/21/24 08:36	03/21/24 16:14	1
Terphenyl-d14 (Surr)	65		30 - 130	03/21/24 08:36	03/21/24 16:14	1
2-Fluorobiphenyl (Surr)	41		30 - 130	03/21/24 08:36	03/21/24 16:14	1

Method: MA DEP 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
1,2,4-Trichlorobenzene	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
1,2-Dichlorobenzene	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
1,3-Dichlorobenzene	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
1,4-Dichlorobenzene	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
2,4,5-Trichlorophenol	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
2,4,6-Trichlorophenol	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
2,4-Dichlorophenol	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
2,4-Dimethylphenol	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
2,4-Dinitrophenol	ND		737	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
2,4-Dinitrotoluene	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
2,6-Dinitrotoluene	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
2-Chloronaphthalene	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
2-Chlorophenol	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
2-Methylphenol	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
2-Nitroaniline	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
2-Nitrophenol	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
3 & 4 Methylphenol	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
3,3'-Dichlorobenzidine	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
3-Nitroaniline	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
4,6-Dinitro-2-methylphenol	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
4-Bromophenyl phenyl ether	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
4-Chloro-3-methylphenol	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: Comp (5-10)

Lab Sample ID: 620-17450-8

Date Collected: 03/15/24 12:15

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 87.4

Method: MA DEP 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chloroaniline	ND	*-	186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
4-Chlorophenyl phenyl ether	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
4-Nitroaniline	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
4-Nitrophenol	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Acetophenone	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Aniline	ND	*-	368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Azobenzene/Diphenyldiazene	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Benzidine	ND	*-	737	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Benzoic acid	ND	*-	744	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Benzyl alcohol	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Bis(2-chloroethoxy)methane	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Bis(2-chloroethyl)ether	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
bis (2-chloroisopropyl) ether	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Bis(2-ethylhexyl) phthalate	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Butyl benzyl phthalate	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Carbazole	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Dibenzofuran	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Diethyl phthalate	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Dimethyl phthalate	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Di-n-butyl phthalate	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Di-n-octyl phthalate	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Hexachlorobenzene	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Hexachlorobutadiene	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Hexachlorocyclopentadiene	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Hexachloroethane	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Isophorone	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Nitrobenzene	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
N-Nitrosodimethylamine	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
N-Nitrosodi-n-propylamine	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
N-Nitrosodiphenylamine	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Pentachloronitrobenzene	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Pentachlorophenol	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Phenol	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Pyridine	ND	*-	368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	41		30 - 130	03/21/24 08:36	03/21/24 16:14	1
2-Fluorophenol (Surr)	45		15 - 110	03/21/24 08:36	03/21/24 16:14	1
Nitrobenzene-d5 (Surr)	42		30 - 130	03/21/24 08:36	03/21/24 16:14	1
Phenol-d5 (Surr)	45		15 - 110	03/21/24 08:36	03/21/24 16:14	1
2,4,6-Tribromophenol (Surr)	48		15 - 110	03/21/24 08:36	03/21/24 16:14	1
Terphenyl-d14 (Surr)	65		30 - 130	03/21/24 08:36	03/21/24 16:14	1

Method: MA DEP 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		22.1	ug/Kg	☆	03/19/24 14:48	03/22/24 00:14	1
PCB-1221	ND		22.1	ug/Kg	☆	03/19/24 14:48	03/22/24 00:14	1
PCB-1232	ND		22.1	ug/Kg	☆	03/19/24 14:48	03/22/24 00:14	1
PCB-1242	ND		22.1	ug/Kg	☆	03/19/24 14:48	03/22/24 00:14	1
PCB-1248	ND		22.1	ug/Kg	☆	03/19/24 14:48	03/22/24 00:14	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: Comp (5-10)

Lab Sample ID: 620-17450-8

Date Collected: 03/15/24 12:15

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 87.4

Method: MA DEP 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1254	ND		22.1	ug/Kg	☆	03/19/24 14:48	03/22/24 00:14	1
PCB-1262	ND		22.1	ug/Kg	☆	03/19/24 14:48	03/22/24 00:14	1
PCB-1260	ND		22.1	ug/Kg	☆	03/19/24 14:48	03/22/24 00:14	1
PCB-1268	ND		22.1	ug/Kg	☆	03/19/24 14:48	03/22/24 00:14	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	79		30 - 150			03/19/24 14:48	03/22/24 00:14	1
DCB Decachlorobiphenyl (Surr)	66		30 - 150			03/19/24 14:48	03/22/24 00:14	1

Method: SW846 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TEPH (C9-C36)	16.7		14.9	mg/Kg	☆	03/19/24 17:07	03/21/24 15:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctadecane (Surr)	84		40 - 140			03/19/24 17:07	03/21/24 15:57	1
o-Terphenyl (Surr)	73		40 - 140			03/19/24 17:07	03/21/24 15:57	1

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	3.60		2.88	mg/Kg	☆	03/26/24 08:24	03/27/24 15:18	2
Barium	39.3		1.92	mg/Kg	☆	03/26/24 08:24	03/27/24 15:18	2
Cadmium	ND		0.961	mg/Kg	☆	03/26/24 08:24	03/27/24 15:18	2
Chromium	17.4		1.92	mg/Kg	☆	03/26/24 08:24	03/27/24 15:18	2
Lead	5.34		2.88	mg/Kg	☆	03/26/24 08:24	03/27/24 15:18	2
Selenium	ND		2.88	mg/Kg	☆	03/26/24 08:24	03/27/24 15:18	2
Silver	ND		2.88	mg/Kg	☆	03/26/24 08:24	03/27/24 15:18	2

Method: SW846 6010D - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0150	mg/L		03/26/24 15:40	03/27/24 13:23	1

Method: SW846 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0512	mg/Kg	☆	03/19/24 11:28	03/19/24 15:46	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Flashpoint (SW846 1010A)	>170		50.0	Degrees F			03/21/24 10:01	1
Cyanide, Reactive (SW846 9012)	ND		59.9	mg/Kg		03/25/24 08:25	03/25/24 17:07	1
Sulfide, Reactive (SW846 9034)	ND		160	mg/Kg		03/25/24 08:25	03/25/24 12:45	1
Total Organic Carbon (SW846 9060)	1620		300	mg/Kg			03/21/24 13:29	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SW846 9045D)	7.9			SU			03/28/24 11:32	1
Temperature (SW846 9045D)	23.4			Degrees C			03/28/24 11:32	1
Specific Conductance (SM 2510B)	601		10.0	uS/cm			03/28/24 11:04	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-8 (0-5)

Lab Sample ID: 620-17450-9

Date Collected: 03/14/24 10:00

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 88.0

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Acetone	ND		61.9	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Acrylonitrile	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Benzene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Bromobenzene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Bromochloromethane	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Bromodichloromethane	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Bromoform	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Bromomethane	ND		12.4	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
2-Butanone (MEK)	ND		12.4	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
n-Butylbenzene	ND		12.4	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
sec-Butylbenzene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
tert-Butylbenzene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Carbon disulfide	ND		12.4	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Carbon tetrachloride	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Chlorobenzene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Chloroethane	ND		12.4	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Chloroform	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Chloromethane	ND		12.4	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
2-Chlorotoluene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
4-Chlorotoluene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
1,2-Dibromo-3-Chloropropane	ND		12.4	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Dibromochloromethane	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
1,2-Dibromoethane (EDB)	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Dibromomethane	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
1,2-Dichlorobenzene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
1,3-Dichlorobenzene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
1,4-Dichlorobenzene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Dichlorodifluoromethane (Freon 12)	ND		12.4	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
1,1-Dichloroethane	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
1,2-Dichloroethane	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
1,1-Dichloroethene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
cis-1,2-Dichloroethene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
trans-1,2-Dichloroethene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
1,2-Dichloropropane	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
1,3-Dichloropropane	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
2,2-Dichloropropane	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
1,1-Dichloropropene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
cis-1,3-Dichloropropene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
trans-1,3-Dichloropropene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Ethylbenzene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Hexachlorobutadiene	ND		12.4	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
2-Hexanone (MBK)	ND		12.4	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Isopropylbenzene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
4-Isopropyltoluene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Methyl tert-butyl ether	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
4-Methyl-2-pentanone (MIBK)	ND		12.4	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Methylene Chloride	ND		12.4	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Naphthalene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1

Euofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-8 (0-5)

Lab Sample ID: 620-17450-9

Date Collected: 03/14/24 10:00

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 88.0

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
Styrene	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
1,1,1,2-Tetrachloroethane	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
1,1,2,2-Tetrachloroethane	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
Tetrachloroethene	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
Toluene	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
1,2,3-Trichlorobenzene	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
1,2,4-Trichlorobenzene	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
1,3,5-Trichlorobenzene	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
1,1,1-Trichloroethane	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
1,1,2-Trichloroethane	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
Trichloroethene	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
Trichlorofluoromethane (Freon 11)	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
1,2,3-Trichloropropane	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
1,2,4-Trimethylbenzene	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
1,3,5-Trimethylbenzene	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
Vinyl chloride	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
m,p-Xylene	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
o-Xylene	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
Tetrahydrofuran	ND		12.4	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
Ethyl ether	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
Tert-amyl methyl ether	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
Ethyl tert-butyl ether	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
di-Isopropyl ether	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
tert-Butanol	ND		124	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
1,4-Dioxane	ND		124	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
trans-1,4-Dichloro-2-butene	ND		31.0	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
Ethanol	ND		1240	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
1,3-Dichloropropene, Total	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
Xylenes, Total	ND		18.6	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	03/26/24 07:37	03/26/24 14:40	1
Toluene-d8 (Surr)	98		70 - 130	03/26/24 07:37	03/26/24 14:40	1
1,2-Dichloroethane-d4 (Surr)	101		70 - 130	03/26/24 07:37	03/26/24 14:40	1
Dibromofluoromethane (Surr)	100		70 - 130	03/26/24 07:37	03/26/24 14:40	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-8 (5-10)

Lab Sample ID: 620-17450-10

Date Collected: 03/14/24 11:50

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 77.8

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Acetone	ND		49.4	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Acrylonitrile	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Benzene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Bromobenzene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Bromochloromethane	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Bromodichloromethane	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Bromoform	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Bromomethane	ND		9.88	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
2-Butanone (MEK)	ND		9.88	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
n-Butylbenzene	ND		9.88	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
sec-Butylbenzene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
tert-Butylbenzene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Carbon disulfide	ND		9.88	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Carbon tetrachloride	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Chlorobenzene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Chloroethane	ND		9.88	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Chloroform	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Chloromethane	ND		9.88	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
2-Chlorotoluene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
4-Chlorotoluene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
1,2-Dibromo-3-Chloropropane	ND		9.88	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Dibromochloromethane	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
1,2-Dibromoethane (EDB)	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Dibromomethane	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
1,2-Dichlorobenzene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
1,3-Dichlorobenzene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
1,4-Dichlorobenzene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Dichlorodifluoromethane (Freon 12)	ND		9.88	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
1,1-Dichloroethane	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
1,2-Dichloroethane	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
1,1-Dichloroethene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
cis-1,2-Dichloroethene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
trans-1,2-Dichloroethene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
1,2-Dichloropropane	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
1,3-Dichloropropane	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
2,2-Dichloropropane	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
1,1-Dichloropropene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
cis-1,3-Dichloropropene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
trans-1,3-Dichloropropene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Ethylbenzene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Hexachlorobutadiene	ND		9.88	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
2-Hexanone (MBK)	ND		9.88	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Isopropylbenzene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
4-Isopropyltoluene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Methyl tert-butyl ether	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
4-Methyl-2-pentanone (MIBK)	ND		9.88	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Methylene Chloride	ND		9.88	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Naphthalene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1

Euofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-8 (5-10)

Lab Sample ID: 620-17450-10

Date Collected: 03/14/24 11:50

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 77.8

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
Styrene	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
1,1,1,2-Tetrachloroethane	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
1,1,2,2-Tetrachloroethane	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
Tetrachloroethene	13.4		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
Toluene	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
1,2,3-Trichlorobenzene	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
1,2,4-Trichlorobenzene	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
1,3,5-Trichlorobenzene	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
1,1,1-Trichloroethane	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
1,1,2-Trichloroethane	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
Trichloroethene	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
Trichlorofluoromethane (Freon 11)	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
1,2,3-Trichloropropane	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
1,2,4-Trimethylbenzene	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
1,3,5-Trimethylbenzene	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
Vinyl chloride	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
m,p-Xylene	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
o-Xylene	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
Tetrahydrofuran	ND		9.88	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
Ethyl ether	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
Tert-amyl methyl ether	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
Ethyl tert-butyl ether	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
di-Isopropyl ether	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
tert-Butanol	ND		98.8	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
1,4-Dioxane	ND		98.8	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
trans-1,4-Dichloro-2-butene	ND		24.7	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
Ethanol	ND		988	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
1,3-Dichloropropene, Total	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
Xylenes, Total	ND		14.8	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130			03/26/24 07:37	03/26/24 15:06	1
Toluene-d8 (Surr)	99		70 - 130			03/26/24 07:37	03/26/24 15:06	1
1,2-Dichloroethane-d4 (Surr)	103		70 - 130			03/26/24 07:37	03/26/24 15:06	1
Dibromofluoromethane (Surr)	100		70 - 130			03/26/24 07:37	03/26/24 15:06	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-7 (0-5)

Lab Sample ID: 620-17450-11

Date Collected: 03/14/24 11:10

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 91.0

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Acetone	ND		46.7	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Acrylonitrile	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Benzene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Bromobenzene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Bromochloromethane	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Bromodichloromethane	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Bromoform	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Bromomethane	ND		9.34	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
2-Butanone (MEK)	ND		9.34	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
n-Butylbenzene	ND		9.34	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
sec-Butylbenzene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
tert-Butylbenzene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Carbon disulfide	ND		9.34	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Carbon tetrachloride	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Chlorobenzene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Chloroethane	ND		9.34	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Chloroform	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Chloromethane	ND		9.34	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
2-Chlorotoluene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
4-Chlorotoluene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
1,2-Dibromo-3-Chloropropane	ND		9.34	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Dibromochloromethane	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
1,2-Dibromoethane (EDB)	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Dibromomethane	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
1,2-Dichlorobenzene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
1,3-Dichlorobenzene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
1,4-Dichlorobenzene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Dichlorodifluoromethane (Freon 12)	ND		9.34	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
1,1-Dichloroethane	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
1,2-Dichloroethane	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
1,1-Dichloroethene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
cis-1,2-Dichloroethene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
trans-1,2-Dichloroethene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
1,2-Dichloropropane	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
1,3-Dichloropropane	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
2,2-Dichloropropane	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
1,1-Dichloropropene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
cis-1,3-Dichloropropene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
trans-1,3-Dichloropropene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Ethylbenzene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Hexachlorobutadiene	ND		9.34	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
2-Hexanone (MBK)	ND		9.34	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Isopropylbenzene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
4-Isopropyltoluene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Methyl tert-butyl ether	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
4-Methyl-2-pentanone (MIBK)	ND		9.34	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Methylene Chloride	ND		9.34	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Naphthalene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1

Euofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-7 (0-5)

Lab Sample ID: 620-17450-11

Date Collected: 03/14/24 11:10

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 91.0

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
Styrene	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
1,1,1,2-Tetrachloroethane	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
1,1,2,2-Tetrachloroethane	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
Tetrachloroethene	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
Toluene	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
1,2,3-Trichlorobenzene	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
1,2,4-Trichlorobenzene	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
1,3,5-Trichlorobenzene	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
1,1,1-Trichloroethane	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
1,1,2-Trichloroethane	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
Trichloroethene	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
Trichlorofluoromethane (Freon 11)	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
1,2,3-Trichloropropane	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
1,2,4-Trimethylbenzene	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
1,3,5-Trimethylbenzene	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
Vinyl chloride	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
m,p-Xylene	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
o-Xylene	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
Tetrahydrofuran	ND		9.34	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
Ethyl ether	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
Tert-amyl methyl ether	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
Ethyl tert-butyl ether	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
di-Isopropyl ether	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
tert-Butanol	ND		93.4	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
1,4-Dioxane	ND		93.4	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
trans-1,4-Dichloro-2-butene	ND		23.4	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
Ethanol	ND		934	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
1,3-Dichloropropene, Total	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
Xylenes, Total	ND		14.0	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	03/26/24 07:37	03/26/24 15:31	1
Toluene-d8 (Surr)	99		70 - 130	03/26/24 07:37	03/26/24 15:31	1
1,2-Dichloroethane-d4 (Surr)	100		70 - 130	03/26/24 07:37	03/26/24 15:31	1
Dibromofluoromethane (Surr)	101		70 - 130	03/26/24 07:37	03/26/24 15:31	1

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-7 (5-10)

Lab Sample ID: 620-17450-12

Date Collected: 03/14/24 12:10

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 78.4

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Acetone	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Acrylonitrile	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Benzene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Bromobenzene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Bromochloromethane	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Bromodichloromethane	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Bromoform	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Bromomethane	ND		25.3	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
2-Butanone (MEK)	ND		25.3	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
n-Butylbenzene	ND		25.3	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
sec-Butylbenzene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
tert-Butylbenzene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Carbon disulfide	ND		25.3	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Carbon tetrachloride	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Chlorobenzene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Chloroethane	ND		25.3	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Chloroform	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Chloromethane	ND		25.3	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
2-Chlorotoluene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
4-Chlorotoluene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
1,2-Dibromo-3-Chloropropane	ND		25.3	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Dibromochloromethane	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
1,2-Dibromoethane (EDB)	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Dibromomethane	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
1,2-Dichlorobenzene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
1,3-Dichlorobenzene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
1,4-Dichlorobenzene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Dichlorodifluoromethane (Freon 12)	ND		25.3	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
1,1-Dichloroethane	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
1,2-Dichloroethane	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
1,1-Dichloroethene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
cis-1,2-Dichloroethene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
trans-1,2-Dichloroethene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
1,2-Dichloropropane	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
1,3-Dichloropropane	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
2,2-Dichloropropane	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
1,1-Dichloropropene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
cis-1,3-Dichloropropene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
trans-1,3-Dichloropropene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Ethylbenzene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Hexachlorobutadiene	ND		25.3	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
2-Hexanone (MBK)	ND		25.3	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Isopropylbenzene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
4-Isopropyltoluene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Methyl tert-butyl ether	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
4-Methyl-2-pentanone (MIBK)	ND		25.3	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Methylene Chloride	ND		25.3	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Naphthalene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1

Euofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-7 (5-10)

Lab Sample ID: 620-17450-12

Date Collected: 03/14/24 12:10

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 78.4

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
Styrene	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
1,1,1,2-Tetrachloroethane	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
1,1,2,2-Tetrachloroethane	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
Tetrachloroethene	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
Toluene	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
1,2,3-Trichlorobenzene	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
1,2,4-Trichlorobenzene	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
1,3,5-Trichlorobenzene	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
1,1,1-Trichloroethane	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
1,1,2-Trichloroethane	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
Trichloroethene	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
Trichlorofluoromethane (Freon 11)	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
1,2,3-Trichloropropane	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
1,2,4-Trimethylbenzene	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
1,3,5-Trimethylbenzene	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
Vinyl chloride	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
m,p-Xylene	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
o-Xylene	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
Tetrahydrofuran	ND		25.3	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
Ethyl ether	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
Tert-amyl methyl ether	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
Ethyl tert-butyl ether	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
di-Isopropyl ether	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
tert-Butanol	ND		253	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
1,4-Dioxane	ND		253	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
trans-1,4-Dichloro-2-butene	ND		63.2	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
Ethanol	ND		2530	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
1,3-Dichloropropene, Total	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
Xylenes, Total	ND		37.9	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	03/26/24 07:37	03/26/24 15:57	1
Toluene-d8 (Surr)	99		70 - 130	03/26/24 07:37	03/26/24 15:57	1
1,2-Dichloroethane-d4 (Surr)	103		70 - 130	03/26/24 07:37	03/26/24 15:57	1
Dibromofluoromethane (Surr)	102		70 - 130	03/26/24 07:37	03/26/24 15:57	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-6 (0-5)

Lab Sample ID: 620-17450-13

Date Collected: 03/14/24 12:30

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 89.6

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Acetone	ND		52.1	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Acrylonitrile	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Benzene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Bromobenzene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Bromochloromethane	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Bromodichloromethane	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Bromoform	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Bromomethane	ND		10.4	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
2-Butanone (MEK)	ND		10.4	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
n-Butylbenzene	ND		10.4	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
sec-Butylbenzene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
tert-Butylbenzene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Carbon disulfide	ND		10.4	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Carbon tetrachloride	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Chlorobenzene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Chloroethane	ND		10.4	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Chloroform	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Chloromethane	ND		10.4	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
2-Chlorotoluene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
4-Chlorotoluene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
1,2-Dibromo-3-Chloropropane	ND		10.4	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Dibromochloromethane	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
1,2-Dibromoethane (EDB)	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Dibromomethane	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
1,2-Dichlorobenzene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
1,3-Dichlorobenzene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
1,4-Dichlorobenzene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Dichlorodifluoromethane (Freon 12)	ND		10.4	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
1,1-Dichloroethane	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
1,2-Dichloroethane	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
1,1-Dichloroethene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
cis-1,2-Dichloroethene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
trans-1,2-Dichloroethene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
1,2-Dichloropropane	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
1,3-Dichloropropane	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
2,2-Dichloropropane	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
1,1-Dichloropropene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
cis-1,3-Dichloropropene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
trans-1,3-Dichloropropene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Ethylbenzene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Hexachlorobutadiene	ND		10.4	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
2-Hexanone (MBK)	ND		10.4	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Isopropylbenzene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
4-Isopropyltoluene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Methyl tert-butyl ether	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
4-Methyl-2-pentanone (MIBK)	ND		10.4	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Methylene Chloride	ND		10.4	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Naphthalene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1

Euofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-6 (0-5)

Lab Sample ID: 620-17450-13

Date Collected: 03/14/24 12:30

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 89.6

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
Styrene	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
1,1,1,2-Tetrachloroethane	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
1,1,2,2-Tetrachloroethane	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
Tetrachloroethene	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
Toluene	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
1,2,3-Trichlorobenzene	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
1,2,4-Trichlorobenzene	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
1,3,5-Trichlorobenzene	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
1,1,1-Trichloroethane	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
1,1,2-Trichloroethane	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
Trichloroethene	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
Trichlorofluoromethane (Freon 11)	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
1,2,3-Trichloropropane	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
1,2,4-Trimethylbenzene	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
1,3,5-Trimethylbenzene	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
Vinyl chloride	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
m,p-Xylene	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
o-Xylene	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
Tetrahydrofuran	ND		10.4	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
Ethyl ether	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
Tert-amyl methyl ether	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
Ethyl tert-butyl ether	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
di-Isopropyl ether	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
tert-Butanol	ND		104	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
1,4-Dioxane	ND		104	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
trans-1,4-Dichloro-2-butene	ND		26.1	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
Ethanol	ND		1040	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
1,3-Dichloropropene, Total	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
Xylenes, Total	ND		15.6	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130	03/26/24 07:37	03/26/24 16:24	1
Toluene-d8 (Surr)	99		70 - 130	03/26/24 07:37	03/26/24 16:24	1
1,2-Dichloroethane-d4 (Surr)	99		70 - 130	03/26/24 07:37	03/26/24 16:24	1
Dibromofluoromethane (Surr)	101		70 - 130	03/26/24 07:37	03/26/24 16:24	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-6 (5-10)

Lab Sample ID: 620-17450-14

Date Collected: 03/14/24 12:45

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 92.6

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
Acetone	ND		57.5	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
Acrylonitrile	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
Benzene	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
Bromobenzene	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
Bromochloromethane	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
Bromodichloromethane	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
Bromoform	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
Bromomethane	ND		11.5	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
2-Butanone (MEK)	ND		11.5	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
n-Butylbenzene	ND		11.5	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
sec-Butylbenzene	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
tert-Butylbenzene	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
Carbon disulfide	ND		11.5	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
Carbon tetrachloride	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
Chlorobenzene	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
Chloroethane	ND		11.5	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
Chloroform	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
Chloromethane	ND		11.5	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
2-Chlorotoluene	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
4-Chlorotoluene	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
1,2-Dibromo-3-Chloropropane	ND		11.5	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
Dibromochloromethane	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
1,2-Dibromoethane (EDB)	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
Dibromomethane	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
1,2-Dichlorobenzene	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
1,3-Dichlorobenzene	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
1,4-Dichlorobenzene	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
Dichlorodifluoromethane (Freon 12)	ND		11.5	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
1,1-Dichloroethane	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
1,2-Dichloroethane	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
1,1-Dichloroethene	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
cis-1,2-Dichloroethene	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
trans-1,2-Dichloroethene	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
1,2-Dichloropropane	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
1,3-Dichloropropane	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
2,2-Dichloropropane	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
1,1-Dichloropropene	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
cis-1,3-Dichloropropene	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
trans-1,3-Dichloropropene	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
Ethylbenzene	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
Hexachlorobutadiene	ND		11.5	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
2-Hexanone (MBK)	ND		11.5	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
Isopropylbenzene	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
4-Isopropyltoluene	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
Methyl tert-butyl ether	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
4-Methyl-2-pentanone (MIBK)	ND		11.5	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
Methylene Chloride	ND		11.5	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
Naphthalene	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1

Euofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-6 (5-10)

Lab Sample ID: 620-17450-14

Date Collected: 03/14/24 12:45

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 92.6

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Styrene	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
1,1,1,2-Tetrachloroethane	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
1,1,2,2-Tetrachloroethane	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Tetrachloroethene	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Toluene	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
1,2,3-Trichlorobenzene	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
1,2,4-Trichlorobenzene	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
1,3,5-Trichlorobenzene	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
1,1,1-Trichloroethane	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
1,1,2-Trichloroethane	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Trichloroethene	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Trichlorofluoromethane (Freon 11)	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
1,2,3-Trichloropropane	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
1,2,4-Trimethylbenzene	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
1,3,5-Trimethylbenzene	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Vinyl chloride	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
m,p-Xylene	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
o-Xylene	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Tetrahydrofuran	ND		11.5	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Ethyl ether	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Tert-amyl methyl ether	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Ethyl tert-butyl ether	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
di-Isopropyl ether	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
tert-Butanol	ND		115	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
1,4-Dioxane	ND		115	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
trans-1,4-Dichloro-2-butene	ND		28.8	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Ethanol	ND		1150	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
1,3-Dichloropropene, Total	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Xylenes, Total	ND		17.3	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	03/26/24 07:37	03/26/24 16:50	1
Toluene-d8 (Surr)	99		70 - 130	03/26/24 07:37	03/26/24 16:50	1
1,2-Dichloroethane-d4 (Surr)	101		70 - 130	03/26/24 07:37	03/26/24 16:50	1
Dibromofluoromethane (Surr)	101		70 - 130	03/26/24 07:37	03/26/24 16:50	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-4 (0-5)

Lab Sample ID: 620-17450-15

Date Collected: 03/14/24 13:40

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 89.4

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Acetone	ND		50.4	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Acrylonitrile	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Benzene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Bromobenzene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Bromochloromethane	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Bromodichloromethane	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Bromoform	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Bromomethane	ND		10.1	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
2-Butanone (MEK)	ND		10.1	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
n-Butylbenzene	ND		10.1	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
sec-Butylbenzene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
tert-Butylbenzene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Carbon disulfide	ND		10.1	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Carbon tetrachloride	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Chlorobenzene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Chloroethane	ND		10.1	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Chloroform	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Chloromethane	ND		10.1	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
2-Chlorotoluene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
4-Chlorotoluene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,2-Dibromo-3-Chloropropane	ND		10.1	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Dibromochloromethane	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,2-Dibromoethane (EDB)	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Dibromomethane	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,2-Dichlorobenzene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,3-Dichlorobenzene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,4-Dichlorobenzene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Dichlorodifluoromethane (Freon 12)	ND		10.1	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,1-Dichloroethane	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,2-Dichloroethane	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,1-Dichloroethene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
cis-1,2-Dichloroethene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
trans-1,2-Dichloroethene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,2-Dichloropropane	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,3-Dichloropropane	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
2,2-Dichloropropane	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,1-Dichloropropene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
cis-1,3-Dichloropropene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
trans-1,3-Dichloropropene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Ethylbenzene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Hexachlorobutadiene	ND		10.1	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
2-Hexanone (MBK)	ND		10.1	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Isopropylbenzene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
4-Isopropyltoluene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Methyl tert-butyl ether	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
4-Methyl-2-pentanone (MIBK)	ND		10.1	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Methylene Chloride	ND		10.1	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Naphthalene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-4 (0-5)

Lab Sample ID: 620-17450-15

Date Collected: 03/14/24 13:40

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 89.4

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Styrene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,1,1,2-Tetrachloroethane	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,1,2,2-Tetrachloroethane	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Tetrachloroethene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Toluene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,2,3-Trichlorobenzene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,2,4-Trichlorobenzene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,3,5-Trichlorobenzene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,1,1-Trichloroethane	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,1,2-Trichloroethane	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Trichloroethene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Trichlorofluoromethane (Freon 11)	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,2,3-Trichloropropane	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,2,4-Trimethylbenzene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,3,5-Trimethylbenzene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Vinyl chloride	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
m,p-Xylene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
o-Xylene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Tetrahydrofuran	ND		10.1	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Ethyl ether	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Tert-amyl methyl ether	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Ethyl tert-butyl ether	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
di-Isopropyl ether	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
tert-Butanol	ND		101	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,4-Dioxane	ND		101	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
trans-1,4-Dichloro-2-butene	ND		25.2	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Ethanol	ND		1010	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,3-Dichloropropene, Total	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Xylenes, Total	ND		15.1	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	03/26/24 07:37	03/26/24 17:15	1
Toluene-d8 (Surr)	100		70 - 130	03/26/24 07:37	03/26/24 17:15	1
1,2-Dichloroethane-d4 (Surr)	108		70 - 130	03/26/24 07:37	03/26/24 17:15	1
Dibromofluoromethane (Surr)	103		70 - 130	03/26/24 07:37	03/26/24 17:15	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-4 (5-10)

Lab Sample ID: 620-17450-16

Date Collected: 03/14/24 13:55

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 92.2

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
Acetone	ND		52.6	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
Acrylonitrile	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
Benzene	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
Bromobenzene	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
Bromochloromethane	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
Bromodichloromethane	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
Bromoform	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
Bromomethane	ND		10.5	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
2-Butanone (MEK)	ND		10.5	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
n-Butylbenzene	ND		10.5	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
sec-Butylbenzene	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
tert-Butylbenzene	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
Carbon disulfide	ND		10.5	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
Carbon tetrachloride	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
Chlorobenzene	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
Chloroethane	ND		10.5	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
Chloroform	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
Chloromethane	ND		10.5	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
2-Chlorotoluene	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
4-Chlorotoluene	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
1,2-Dibromo-3-Chloropropane	ND		10.5	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
Dibromochloromethane	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
1,2-Dibromoethane (EDB)	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
Dibromomethane	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
1,2-Dichlorobenzene	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
1,3-Dichlorobenzene	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
1,4-Dichlorobenzene	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
Dichlorodifluoromethane (Freon 12)	ND		10.5	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
1,1-Dichloroethane	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
1,2-Dichloroethane	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
1,1-Dichloroethene	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
cis-1,2-Dichloroethene	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
trans-1,2-Dichloroethene	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
1,2-Dichloropropane	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
1,3-Dichloropropane	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
2,2-Dichloropropane	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
1,1-Dichloropropene	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
cis-1,3-Dichloropropene	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
trans-1,3-Dichloropropene	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
Ethylbenzene	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
Hexachlorobutadiene	ND		10.5	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
2-Hexanone (MBK)	ND		10.5	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
Isopropylbenzene	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
4-Isopropyltoluene	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
Methyl tert-butyl ether	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
4-Methyl-2-pentanone (MIBK)	ND		10.5	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
Methylene Chloride	ND		10.5	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
Naphthalene	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1

Euofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-4 (5-10)

Lab Sample ID: 620-17450-16

Date Collected: 03/14/24 13:55

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 92.2

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Styrene	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
1,1,1,2-Tetrachloroethane	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
1,1,2,2-Tetrachloroethane	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Tetrachloroethene	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Toluene	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
1,2,3-Trichlorobenzene	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
1,2,4-Trichlorobenzene	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
1,3,5-Trichlorobenzene	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
1,1,1-Trichloroethane	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
1,1,2-Trichloroethane	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Trichloroethene	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Trichlorofluoromethane (Freon 11)	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
1,2,3-Trichloropropane	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
1,2,4-Trimethylbenzene	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
1,3,5-Trimethylbenzene	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Vinyl chloride	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
m,p-Xylene	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
o-Xylene	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Tetrahydrofuran	ND		10.5	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Ethyl ether	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Tert-amyl methyl ether	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Ethyl tert-butyl ether	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
di-Isopropyl ether	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
tert-Butanol	ND		105	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
1,4-Dioxane	ND		105	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
trans-1,4-Dichloro-2-butene	ND		26.3	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Ethanol	ND		1050	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
1,3-Dichloropropene, Total	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Xylenes, Total	ND		15.8	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	03/26/24 07:37	03/26/24 17:41	1
Toluene-d8 (Surr)	99		70 - 130	03/26/24 07:37	03/26/24 17:41	1
1,2-Dichloroethane-d4 (Surr)	102		70 - 130	03/26/24 07:37	03/26/24 17:41	1
Dibromofluoromethane (Surr)	100		70 - 130	03/26/24 07:37	03/26/24 17:41	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-5 (0-5)

Lab Sample ID: 620-17450-17

Date Collected: 03/14/24 14:25

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 89.7

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Acetone	ND		49.2	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Acrylonitrile	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Benzene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Bromobenzene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Bromochloromethane	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Bromodichloromethane	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Bromoform	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Bromomethane	ND		9.85	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
2-Butanone (MEK)	ND		9.85	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
n-Butylbenzene	ND		9.85	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
sec-Butylbenzene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
tert-Butylbenzene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Carbon disulfide	ND		9.85	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Carbon tetrachloride	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Chlorobenzene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Chloroethane	ND		9.85	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Chloroform	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Chloromethane	ND		9.85	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
2-Chlorotoluene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
4-Chlorotoluene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
1,2-Dibromo-3-Chloropropane	ND		9.85	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Dibromochloromethane	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
1,2-Dibromoethane (EDB)	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Dibromomethane	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
1,2-Dichlorobenzene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
1,3-Dichlorobenzene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
1,4-Dichlorobenzene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Dichlorodifluoromethane (Freon 12)	ND		9.85	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
1,1-Dichloroethane	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
1,2-Dichloroethane	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
1,1-Dichloroethene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
cis-1,2-Dichloroethene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
trans-1,2-Dichloroethene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
1,2-Dichloropropane	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
1,3-Dichloropropane	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
2,2-Dichloropropane	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
1,1-Dichloropropene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
cis-1,3-Dichloropropene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
trans-1,3-Dichloropropene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Ethylbenzene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Hexachlorobutadiene	ND		9.85	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
2-Hexanone (MBK)	ND		9.85	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Isopropylbenzene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
4-Isopropyltoluene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Methyl tert-butyl ether	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
4-Methyl-2-pentanone (MIBK)	ND		9.85	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Methylene Chloride	ND		9.85	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Naphthalene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1

Euofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-5 (0-5)

Lab Sample ID: 620-17450-17

Date Collected: 03/14/24 14:25

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 89.7

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
Styrene	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
1,1,1,2-Tetrachloroethane	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
1,1,2,2-Tetrachloroethane	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
Tetrachloroethene	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
Toluene	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
1,2,3-Trichlorobenzene	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
1,2,4-Trichlorobenzene	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
1,3,5-Trichlorobenzene	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
1,1,1-Trichloroethane	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
1,1,2-Trichloroethane	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
Trichloroethene	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
Trichlorofluoromethane (Freon 11)	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
1,2,3-Trichloropropane	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
1,2,4-Trimethylbenzene	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
1,3,5-Trimethylbenzene	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
Vinyl chloride	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
m,p-Xylene	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
o-Xylene	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
Tetrahydrofuran	ND		9.85	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
Ethyl ether	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
Tert-amyl methyl ether	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
Ethyl tert-butyl ether	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
di-Isopropyl ether	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
tert-Butanol	ND		98.5	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
1,4-Dioxane	ND		98.5	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
trans-1,4-Dichloro-2-butene	ND		24.6	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
Ethanol	ND		985	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
1,3-Dichloropropene, Total	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
Xylenes, Total	ND		14.8	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	03/26/24 07:37	03/26/24 18:07	1
Toluene-d8 (Surr)	98		70 - 130	03/26/24 07:37	03/26/24 18:07	1
1,2-Dichloroethane-d4 (Surr)	101		70 - 130	03/26/24 07:37	03/26/24 18:07	1
Dibromofluoromethane (Surr)	101		70 - 130	03/26/24 07:37	03/26/24 18:07	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-5 (5-10)

Lab Sample ID: 620-17450-18

Date Collected: 03/14/24 12:10

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 92.9

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Acetone	ND		44.3	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Acrylonitrile	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Benzene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Bromobenzene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Bromochloromethane	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Bromodichloromethane	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Bromoform	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Bromomethane	ND		8.87	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
2-Butanone (MEK)	ND		8.87	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
n-Butylbenzene	ND		8.87	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
sec-Butylbenzene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
tert-Butylbenzene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Carbon disulfide	ND		8.87	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Carbon tetrachloride	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Chlorobenzene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Chloroethane	ND		8.87	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Chloroform	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Chloromethane	ND		8.87	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
2-Chlorotoluene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
4-Chlorotoluene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
1,2-Dibromo-3-Chloropropane	ND		8.87	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Dibromochloromethane	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
1,2-Dibromoethane (EDB)	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Dibromomethane	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
1,2-Dichlorobenzene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
1,3-Dichlorobenzene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
1,4-Dichlorobenzene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Dichlorodifluoromethane (Freon 12)	ND		8.87	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
1,1-Dichloroethane	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
1,2-Dichloroethane	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
1,1-Dichloroethene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
cis-1,2-Dichloroethene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
trans-1,2-Dichloroethene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
1,2-Dichloropropane	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
1,3-Dichloropropane	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
2,2-Dichloropropane	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
1,1-Dichloropropene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
cis-1,3-Dichloropropene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
trans-1,3-Dichloropropene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Ethylbenzene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Hexachlorobutadiene	ND		8.87	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
2-Hexanone (MBK)	ND		8.87	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Isopropylbenzene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
4-Isopropyltoluene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Methyl tert-butyl ether	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
4-Methyl-2-pentanone (MIBK)	ND		8.87	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Methylene Chloride	ND		8.87	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Naphthalene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1

Euofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-5 (5-10)

Lab Sample ID: 620-17450-18

Date Collected: 03/14/24 12:10

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 92.9

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
Styrene	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
1,1,1,2-Tetrachloroethane	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
1,1,2,2-Tetrachloroethane	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
Tetrachloroethene	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
Toluene	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
1,2,3-Trichlorobenzene	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
1,2,4-Trichlorobenzene	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
1,3,5-Trichlorobenzene	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
1,1,1-Trichloroethane	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
1,1,2-Trichloroethane	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
Trichloroethene	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
Trichlorofluoromethane (Freon 11)	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
1,2,3-Trichloropropane	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
1,2,4-Trimethylbenzene	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
1,3,5-Trimethylbenzene	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
Vinyl chloride	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
m,p-Xylene	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
o-Xylene	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
Tetrahydrofuran	ND		8.87	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
Ethyl ether	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
Tert-amyl methyl ether	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
Ethyl tert-butyl ether	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
di-Isopropyl ether	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
tert-Butanol	ND		88.7	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
1,4-Dioxane	ND		88.7	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
trans-1,4-Dichloro-2-butene	ND		22.2	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
Ethanol	ND		887	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
1,3-Dichloropropene, Total	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
Xylenes, Total	ND		13.3	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	03/26/24 07:37	03/26/24 18:33	1
Toluene-d8 (Surr)	100		70 - 130	03/26/24 07:37	03/26/24 18:33	1
1,2-Dichloroethane-d4 (Surr)	102		70 - 130	03/26/24 07:37	03/26/24 18:33	1
Dibromofluoromethane (Surr)	101		70 - 130	03/26/24 07:37	03/26/24 18:33	1

Eurofins New England

Surrogate Summary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		BFB (70-130)	TOL (70-130)	DCA (70-130)	DBFM (70-130)
620-17450-1	ATC-3 (0-5)	97	97	99	97
620-17450-2	ATC-3 (5-10)	97	98	100	100
620-17450-3	ATC-2 (0-5)	97	97	100	100
620-17450-4	ATC-2 (5-10)	99	99	113	105
620-17450-5	ATC-1 (0-5)	97	99	101	100
620-17450-6	ATC-1 (5-10)	97	99	101	101
620-17450-9	ATC-8 (0-5)	98	98	101	100
620-17450-10	ATC-8 (5-10)	99	99	103	100
620-17450-11	ATC-7 (0-5)	97	99	100	101
620-17450-12	ATC-7 (5-10)	96	99	103	102
620-17450-13	ATC-6 (0-5)	95	99	99	101
620-17450-14	ATC-6 (5-10)	96	99	101	101
620-17450-15	ATC-4 (0-5)	97	100	108	103
620-17450-16	ATC-4 (5-10)	99	99	102	100
620-17450-17	ATC-5 (0-5)	96	98	101	101
620-17450-18	ATC-5 (5-10)	96	100	102	101
LCS 620-33086/1-A	Lab Control Sample	100	100	99	101
LCSD 620-33086/2-A	Lab Control Sample Dup	100	101	98	101
MB 620-33086/3-A	Method Blank	100	99	102	100

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

DCA = 1,2-Dichloroethane-d4 (Surr)

DBFM = Dibromofluoromethane (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		FBP (30-130)	2FP (15-110)	NBZ (30-130)	PHL (15-110)	TBP (15-110)	TPHL (30-130)
620-17450-7	Comp (0-5)	50	50	39	54	63	76
620-17450-8	Comp (5-10)	41	45	42	45	48	65
LCS 620-32927/2-A	Lab Control Sample	75	75	71	76	77	77
LCSD 620-32927/3-A	Lab Control Sample Dup	73	75	68	75	79	85
MB 620-32927/1-A	Method Blank	56	64	50	60	58	86

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)

2FP = 2-Fluorophenol (Surr)

NBZ = Nitrobenzene-d5 (Surr)

PHL = Phenol-d5 (Surr)

TBP = 2,4,6-Tribromophenol (Surr)

TPHL = Terphenyl-d14 (Surr)

Eurofins New England

Surrogate Summary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
Lab Sample ID	Client Sample ID	NBZ (30-130)	TPHL (30-130)	FBP (30-130)
620-17450-7	Comp (0-5)	43	76	51
620-17450-8	Comp (5-10)	46	65	41
MB 620-32927/1-A	Method Blank	55	86	57
Surrogate Legend				
NBZ = Nitrobenzene-d5 (Surr)				
TPHL = Terphenyl-d14 (Surr)				
FBP = 2-Fluorobiphenyl (Surr)				

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	TCX1 (30-150)	DCB1 (30-150)
620-17450-7	Comp (0-5)	73	88
620-17450-8	Comp (5-10)	79	66
Surrogate Legend			
TCX = Tetrachloro-m-xylene			
DCB = DCB Decachlorobiphenyl (Surr)			

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1COD (40-140)	OTPH (40-140)
620-17450-7	Comp (0-5)	100	72
620-17450-8	Comp (5-10)	84	73
LCS 620-32878/2-A	Lab Control Sample	84	79
LCSD 620-32878/3-A	Lab Control Sample Dup	69	64
MB 620-32878/1-A	Method Blank	58	55
Surrogate Legend			
1COD = 1-Chlorooctadecane (Surr)			
OTPH = o-Terphenyl (Surr)			

QC Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 620-33086/3-A

Matrix: Solid

Analysis Batch: 33087

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 33086

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Acetone	ND		50.0	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Acrylonitrile	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Benzene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Bromobenzene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Bromochloromethane	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Bromodichloromethane	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Bromoform	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Bromomethane	ND		10.0	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
2-Butanone (MEK)	ND		10.0	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
n-Butylbenzene	ND		10.0	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
sec-Butylbenzene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
tert-Butylbenzene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Carbon disulfide	ND		10.0	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Carbon tetrachloride	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Chlorobenzene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Chloroethane	ND		10.0	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Chloroform	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Chloromethane	ND		10.0	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
2-Chlorotoluene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
4-Chlorotoluene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,2-Dibromo-3-Chloropropane	ND		10.0	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Dibromochloromethane	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,2-Dibromoethane (EDB)	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Dibromomethane	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,2-Dichlorobenzene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,3-Dichlorobenzene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,4-Dichlorobenzene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Dichlorodifluoromethane (Freon 12)	ND		10.0	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,1-Dichloroethane	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,2-Dichloroethane	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,1-Dichloroethene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
cis-1,2-Dichloroethene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
trans-1,2-Dichloroethene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,2-Dichloropropane	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,3-Dichloropropane	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
2,2-Dichloropropane	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,1-Dichloropropene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
cis-1,3-Dichloropropene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
trans-1,3-Dichloropropene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Ethylbenzene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Hexachlorobutadiene	ND		10.0	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
2-Hexanone (MBK)	ND		10.0	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Isopropylbenzene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
4-Isopropyltoluene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Methyl tert-butyl ether	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Methylene Chloride	ND		10.0	ug/Kg		03/26/24 07:37	03/26/24 10:56	1

Eurofins New England

QC Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 620-33086/3-A

Matrix: Solid

Analysis Batch: 33087

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 33086

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
N-Propylbenzene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Styrene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,1,1,2-Tetrachloroethane	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,1,1,2,2-Tetrachloroethane	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Tetrachloroethene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Toluene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,2,3-Trichlorobenzene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,2,4-Trichlorobenzene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,3,5-Trichlorobenzene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,1,1-Trichloroethane	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,1,2-Trichloroethane	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Trichloroethene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Trichlorofluoromethane (Freon 11)	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,2,3-Trichloropropane	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,2,4-Trimethylbenzene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,3,5-Trimethylbenzene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Vinyl chloride	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
m,p-Xylene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
o-Xylene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Tetrahydrofuran	ND		10.0	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Ethyl ether	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Tert-amyl methyl ether	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Ethyl tert-butyl ether	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
di-Isopropyl ether	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
tert-Butanol	ND		100	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,4-Dioxane	ND		100	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
trans-1,4-Dichloro-2-butene	ND		25.0	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Ethanol	ND		1000	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,3-Dichloropropene, Total	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Xylenes, Total	ND		15.0	ug/Kg		03/26/24 07:37	03/26/24 10:56	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	03/26/24 07:37	03/26/24 10:56	1
Toluene-d8 (Surr)	99		70 - 130	03/26/24 07:37	03/26/24 10:56	1
1,2-Dichloroethane-d4 (Surr)	102		70 - 130	03/26/24 07:37	03/26/24 10:56	1
Dibromofluoromethane (Surr)	100		70 - 130	03/26/24 07:37	03/26/24 10:56	1

Lab Sample ID: LCS 620-33086/1-A

Matrix: Solid

Analysis Batch: 33087

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 33086

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.0	18.80		ug/Kg		94	70 - 130
Acetone	20.0	19.91	J	ug/Kg		100	70 - 130
Acrylonitrile	20.0	18.90		ug/Kg		94	70 - 130
Benzene	20.0	19.74		ug/Kg		99	70 - 130
Bromobenzene	20.0	19.44		ug/Kg		97	70 - 130

Eurofins New England

QC Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 620-33086/1-A

Matrix: Solid

Analysis Batch: 33087

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 33086

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromochloromethane	20.0	19.65		ug/Kg		98	70 - 130
Bromodichloromethane	20.0	19.48		ug/Kg		97	70 - 130
Bromoform	20.0	18.46		ug/Kg		92	70 - 130
Bromomethane	20.0	18.25		ug/Kg		91	70 - 130
2-Butanone (MEK)	20.0	20.90		ug/Kg		105	70 - 130
n-Butylbenzene	20.0	18.28		ug/Kg		91	70 - 130
sec-Butylbenzene	20.0	19.96		ug/Kg		100	70 - 130
tert-Butylbenzene	20.0	18.99		ug/Kg		95	70 - 130
Carbon disulfide	20.0	19.07		ug/Kg		95	70 - 130
Carbon tetrachloride	20.0	19.07		ug/Kg		95	70 - 130
Chlorobenzene	20.0	19.44		ug/Kg		97	70 - 130
Chloroethane	20.0	18.66		ug/Kg		93	70 - 130
Chloroform	20.0	19.45		ug/Kg		97	70 - 130
Chloromethane	20.0	19.80		ug/Kg		99	70 - 130
2-Chlorotoluene	20.0	19.62		ug/Kg		98	70 - 130
4-Chlorotoluene	20.0	19.41		ug/Kg		97	70 - 130
1,2-Dibromo-3-Chloropropane	20.0	19.73		ug/Kg		99	70 - 130
Dibromochloromethane	20.0	19.12		ug/Kg		96	70 - 130
1,2-Dibromoethane (EDB)	20.0	19.94		ug/Kg		100	70 - 130
Dibromomethane	20.0	19.81		ug/Kg		99	70 - 130
1,2-Dichlorobenzene	20.0	18.21		ug/Kg		91	70 - 130
1,3-Dichlorobenzene	20.0	19.39		ug/Kg		97	70 - 130
1,4-Dichlorobenzene	20.0	18.93		ug/Kg		95	70 - 130
Dichlorodifluoromethane (Freon 12)	20.0	18.58		ug/Kg		93	70 - 130
1,1-Dichloroethane	20.0	19.53		ug/Kg		98	70 - 130
1,2-Dichloroethane	20.0	19.50		ug/Kg		98	70 - 130
1,1-Dichloroethene	20.0	19.27		ug/Kg		96	70 - 130
cis-1,2-Dichloroethene	20.0	19.92		ug/Kg		100	70 - 130
trans-1,2-Dichloroethene	20.0	19.75		ug/Kg		99	70 - 130
1,2-Dichloropropane	20.0	19.63		ug/Kg		98	70 - 130
1,3-Dichloropropane	20.0	20.01		ug/Kg		100	70 - 130
2,2-Dichloropropane	20.0	19.68		ug/Kg		98	70 - 130
1,1-Dichloropropene	20.0	20.07		ug/Kg		100	70 - 130
cis-1,3-Dichloropropene	20.0	19.44		ug/Kg		97	70 - 130
trans-1,3-Dichloropropene	20.0	19.97		ug/Kg		100	70 - 130
Ethylbenzene	20.0	19.70		ug/Kg		98	70 - 130
Hexachlorobutadiene	20.0	18.83		ug/Kg		94	70 - 130
2-Hexanone (MBK)	20.0	18.68		ug/Kg		93	70 - 130
Isopropylbenzene	20.0	19.06		ug/Kg		95	70 - 130
4-Isopropyltoluene	20.0	19.14		ug/Kg		96	70 - 130
Methyl tert-butyl ether	20.0	20.44		ug/Kg		102	70 - 130
4-Methyl-2-pentanone (MIBK)	20.0	20.57		ug/Kg		103	70 - 130
Methylene Chloride	20.0	19.10		ug/Kg		95	70 - 130
Naphthalene	20.0	20.69		ug/Kg		103	70 - 130
N-Propylbenzene	20.0	19.71		ug/Kg		99	70 - 130
Styrene	20.0	19.27		ug/Kg		96	70 - 130
1,1,1,2-Tetrachloroethane	20.0	19.24		ug/Kg		96	70 - 130
1,1,2,2-Tetrachloroethane	20.0	19.05		ug/Kg		95	70 - 130

Eurofins New England

QC Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 620-33086/1-A

Matrix: Solid

Analysis Batch: 33087

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 33086

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Tetrachloroethene	20.0	19.72		ug/Kg		99	70 - 130
Toluene	20.0	19.65		ug/Kg		98	70 - 130
1,2,3-Trichlorobenzene	20.0	20.91		ug/Kg		105	70 - 130
1,2,4-Trichlorobenzene	20.0	19.81		ug/Kg		99	70 - 130
1,3,5-Trichlorobenzene	20.0	18.74		ug/Kg		94	70 - 130
1,1,1-Trichloroethane	20.0	19.38		ug/Kg		97	70 - 130
1,1,2-Trichloroethane	20.0	19.62		ug/Kg		98	70 - 130
Trichloroethene	20.0	19.07		ug/Kg		95	70 - 130
Trichlorofluoromethane (Freon 11)	20.0	19.01		ug/Kg		95	70 - 130
1,2,3-Trichloropropane	20.0	19.44		ug/Kg		97	70 - 130
1,2,4-Trimethylbenzene	20.0	18.86		ug/Kg		94	70 - 130
1,3,5-Trimethylbenzene	20.0	19.64		ug/Kg		98	70 - 130
Vinyl chloride	20.0	18.81		ug/Kg		94	70 - 130
m,p-Xylene	20.0	19.63		ug/Kg		98	70 - 130
o-Xylene	20.0	19.32		ug/Kg		97	70 - 130
Tetrahydrofuran	20.0	20.17		ug/Kg		101	70 - 130
Ethyl ether	20.0	19.60		ug/Kg		98	70 - 130
Tert-amyl methyl ether	20.0	19.75		ug/Kg		99	70 - 130
Ethyl tert-butyl ether	20.0	20.42		ug/Kg		102	70 - 130
di-Isopropyl ether	20.0	20.16		ug/Kg		101	70 - 130
tert-Butanol	200	215.9		ug/Kg		108	70 - 130
1,4-Dioxane	200	209.6		ug/Kg		105	70 - 130
trans-1,4-Dichloro-2-butene	20.0	18.36	J	ug/Kg		92	70 - 130
Ethanol	400	389.9	J	ug/Kg		97	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
Toluene-d8 (Surr)	100		70 - 130
1,2-Dichloroethane-d4 (Surr)	99		70 - 130
Dibromofluoromethane (Surr)	101		70 - 130

Lab Sample ID: LCSD 620-33086/2-A

Matrix: Solid

Analysis Batch: 33087

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 33086

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.0	19.20		ug/Kg		96	70 - 130	2	30
Acetone	20.0	17.70	J	ug/Kg		88	70 - 130	12	30
Acrylonitrile	20.0	18.69		ug/Kg		93	70 - 130	1	30
Benzene	20.0	19.95		ug/Kg		100	70 - 130	1	30
Bromobenzene	20.0	19.59		ug/Kg		98	70 - 130	1	30
Bromochloromethane	20.0	20.27		ug/Kg		101	70 - 130	3	30
Bromodichloromethane	20.0	19.66		ug/Kg		98	70 - 130	1	30
Bromoform	20.0	18.18		ug/Kg		91	70 - 130	2	30
Bromomethane	20.0	17.81		ug/Kg		89	70 - 130	2	30
2-Butanone (MEK)	20.0	18.73		ug/Kg		94	70 - 130	11	30
n-Butylbenzene	20.0	18.30		ug/Kg		92	70 - 130	0	30

Eurofins New England

QC Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 620-33086/2-A

Matrix: Solid

Analysis Batch: 33087

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 33086

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
sec-Butylbenzene	20.0	19.93		ug/Kg		100	70 - 130	0	30
tert-Butylbenzene	20.0	19.53		ug/Kg		98	70 - 130	3	30
Carbon disulfide	20.0	19.12		ug/Kg		96	70 - 130	0	30
Carbon tetrachloride	20.0	19.60		ug/Kg		98	70 - 130	3	30
Chlorobenzene	20.0	19.75		ug/Kg		99	70 - 130	2	30
Chloroethane	20.0	19.15		ug/Kg		96	70 - 130	3	30
Chloroform	20.0	19.76		ug/Kg		99	70 - 130	2	30
Chloromethane	20.0	19.69		ug/Kg		98	70 - 130	1	30
2-Chlorotoluene	20.0	19.79		ug/Kg		99	70 - 130	1	30
4-Chlorotoluene	20.0	19.50		ug/Kg		98	70 - 130	0	30
1,2-Dibromo-3-Chloropropane	20.0	19.65		ug/Kg		98	70 - 130	0	30
Dibromochloromethane	20.0	19.25		ug/Kg		96	70 - 130	1	30
1,2-Dibromoethane (EDB)	20.0	19.72		ug/Kg		99	70 - 130	1	30
Dibromomethane	20.0	19.48		ug/Kg		97	70 - 130	2	30
1,2-Dichlorobenzene	20.0	18.63		ug/Kg		93	70 - 130	2	30
1,3-Dichlorobenzene	20.0	19.50		ug/Kg		97	70 - 130	1	30
1,4-Dichlorobenzene	20.0	19.10		ug/Kg		95	70 - 130	1	30
Dichlorodifluoromethane (Freon 12)	20.0	18.81		ug/Kg		94	70 - 130	1	30
1,1-Dichloroethane	20.0	19.83		ug/Kg		99	70 - 130	2	30
1,2-Dichloroethane	20.0	19.57		ug/Kg		98	70 - 130	0	30
1,1-Dichloroethene	20.0	19.71		ug/Kg		99	70 - 130	2	30
cis-1,2-Dichloroethene	20.0	20.11		ug/Kg		101	70 - 130	1	30
trans-1,2-Dichloroethene	20.0	19.86		ug/Kg		99	70 - 130	1	30
1,2-Dichloropropane	20.0	19.78		ug/Kg		99	70 - 130	1	30
1,3-Dichloropropane	20.0	19.81		ug/Kg		99	70 - 130	1	30
2,2-Dichloropropane	20.0	19.78		ug/Kg		99	70 - 130	0	30
1,1-Dichloropropene	20.0	20.47		ug/Kg		102	70 - 130	2	30
cis-1,3-Dichloropropene	20.0	19.56		ug/Kg		98	70 - 130	1	30
trans-1,3-Dichloropropene	20.0	19.71		ug/Kg		99	70 - 130	1	30
Ethylbenzene	20.0	19.96		ug/Kg		100	70 - 130	1	30
Hexachlorobutadiene	20.0	19.93		ug/Kg		100	70 - 130	6	30
2-Hexanone (MBK)	20.0	17.22		ug/Kg		86	70 - 130	8	30
Isopropylbenzene	20.0	19.32		ug/Kg		97	70 - 130	1	30
4-Isopropyltoluene	20.0	19.59		ug/Kg		98	70 - 130	2	30
Methyl tert-butyl ether	20.0	20.32		ug/Kg		102	70 - 130	1	30
4-Methyl-2-pentanone (MIBK)	20.0	19.12		ug/Kg		96	70 - 130	7	30
Methylene Chloride	20.0	19.41		ug/Kg		97	70 - 130	2	30
Naphthalene	20.0	20.94		ug/Kg		105	70 - 130	1	30
N-Propylbenzene	20.0	19.79		ug/Kg		99	70 - 130	0	30
Styrene	20.0	19.22		ug/Kg		96	70 - 130	0	30
1,1,1,2-Tetrachloroethane	20.0	19.46		ug/Kg		97	70 - 130	1	30
1,1,2,2-Tetrachloroethane	20.0	18.74		ug/Kg		94	70 - 130	2	30
Tetrachloroethene	20.0	20.01		ug/Kg		100	70 - 130	1	30
Toluene	20.0	20.00		ug/Kg		100	70 - 130	2	30
1,2,3-Trichlorobenzene	20.0	21.12		ug/Kg		106	70 - 130	1	30
1,2,4-Trichlorobenzene	20.0	20.08		ug/Kg		100	70 - 130	1	30
1,3,5-Trichlorobenzene	20.0	19.10		ug/Kg		96	70 - 130	2	30
1,1,1-Trichloroethane	20.0	19.64		ug/Kg		98	70 - 130	1	30

Eurofins New England

QC Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 620-33086/2-A

Matrix: Solid

Analysis Batch: 33087

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 33086

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,2-Trichloroethane	20.0	19.85		ug/Kg		99	70 - 130	1	30
Trichloroethene	20.0	19.38		ug/Kg		97	70 - 130	2	30
Trichlorofluoromethane (Freon 11)	20.0	19.06		ug/Kg		95	70 - 130	0	30
1,2,3-Trichloropropane	20.0	19.00		ug/Kg		95	70 - 130	2	30
1,2,4-Trimethylbenzene	20.0	19.02		ug/Kg		95	70 - 130	1	30
1,3,5-Trimethylbenzene	20.0	19.95		ug/Kg		100	70 - 130	2	30
Vinyl chloride	20.0	18.85		ug/Kg		94	70 - 130	0	30
m,p-Xylene	20.0	19.88		ug/Kg		99	70 - 130	1	30
o-Xylene	20.0	19.51		ug/Kg		98	70 - 130	1	30
Tetrahydrofuran	20.0	19.04		ug/Kg		95	70 - 130	6	30
Ethyl ether	20.0	19.98		ug/Kg		100	70 - 130	2	30
Tert-amyl methyl ether	20.0	19.77		ug/Kg		99	70 - 130	0	30
Ethyl tert-butyl ether	20.0	20.59		ug/Kg		103	70 - 130	1	30
di-Isopropyl ether	20.0	20.36		ug/Kg		102	70 - 130	1	30
tert-Butanol	200	202.9		ug/Kg		101	70 - 130	6	30
1,4-Dioxane	200	191.8		ug/Kg		96	70 - 130	9	30
trans-1,4-Dichloro-2-butene	20.0	17.90	J	ug/Kg		90	70 - 130	2	30
Ethanol	400	313.8	J	ug/Kg		78	70 - 130	22	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
Toluene-d8 (Surr)	101		70 - 130
1,2-Dichloroethane-d4 (Surr)	98		70 - 130
Dibromofluoromethane (Surr)	101		70 - 130

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 620-32927/1-A

Matrix: Solid

Analysis Batch: 32951

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 32927

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
1,2,4-Trichlorobenzene	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
1,2-Dichlorobenzene	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
1,3-Dichlorobenzene	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
1,4-Dichlorobenzene	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
2,4,5-Trichlorophenol	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
2,4,6-Trichlorophenol	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
2,4-Dichlorophenol	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
2,4-Dimethylphenol	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
2,4-Dinitrophenol	ND		660	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
2,4-Dinitrotoluene	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
2,6-Dinitrotoluene	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
2-Chloronaphthalene	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
2-Chlorophenol	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
2-Methylphenol	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
2-Nitroaniline	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1

Eurofins New England

QC Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 620-32927/1-A

Matrix: Solid

Analysis Batch: 32951

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 32927

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitrophenol	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
3 & 4 Methylphenol	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
3,3'-Dichlorobenzidine	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
3-Nitroaniline	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
4,6-Dinitro-2-methylphenol	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
4-Bromophenyl phenyl ether	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
4-Chloro-3-methylphenol	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
4-Chloroaniline	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
4-Chlorophenyl phenyl ether	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
4-Nitroaniline	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
4-Nitrophenol	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Acetophenone	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Aniline	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Azobenzene/Diphenyldiazene	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Benzidine	ND		660	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Benzoic acid	ND		667	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Benzyl alcohol	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Bis(2-chloroethoxy)methane	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Bis(2-chloroethyl)ether	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
bis (2-chloroisopropyl) ether	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Bis(2-ethylhexyl) phthalate	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Butyl benzyl phthalate	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Carbazole	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Dibenzofuran	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Diethyl phthalate	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Dimethyl phthalate	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Di-n-butyl phthalate	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Di-n-octyl phthalate	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Hexachlorobenzene	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Hexachlorobutadiene	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Hexachlorocyclopentadiene	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Hexachloroethane	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Isophorone	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Nitrobenzene	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
N-Nitrosodimethylamine	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
N-Nitrosodi-n-propylamine	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
N-Nitrosodiphenylamine	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Pentachloronitrobenzene	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Pentachlorophenol	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Phenol	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Pyridine	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	56		30 - 130	03/21/24 08:36	03/21/24 13:46	1
2-Fluorophenol (Surr)	64		15 - 110	03/21/24 08:36	03/21/24 13:46	1
Nitrobenzene-d5 (Surr)	50		30 - 130	03/21/24 08:36	03/21/24 13:46	1
Phenol-d5 (Surr)	60		15 - 110	03/21/24 08:36	03/21/24 13:46	1
2,4,6-Tribromophenol (Surr)	58		15 - 110	03/21/24 08:36	03/21/24 13:46	1

Eurolins New England

QC Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 620-32927/1-A

Matrix: Solid

Analysis Batch: 32951

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 32927

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14 (Surr)	86		30 - 130	03/21/24 08:36	03/21/24 13:46	1

Lab Sample ID: LCS 620-32927/2-A

Matrix: Solid

Analysis Batch: 32951

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 32927

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,4,5-Tetrachlorobenzene	1670	1173		ug/Kg		70	40 - 140
1,2,4-Trichlorobenzene	1670	1139		ug/Kg		68	40 - 140
1,2-Dichlorobenzene	1670	1122		ug/Kg		67	40 - 140
1,3-Dichlorobenzene	1670	1171		ug/Kg		70	40 - 140
1,4-Dichlorobenzene	1670	1147		ug/Kg		69	40 - 140
2,4,5-Trichlorophenol	1670	1191		ug/Kg		71	30 - 130
2,4,6-Trichlorophenol	1670	1318		ug/Kg		79	30 - 130
2,4-Dichlorophenol	1670	1163		ug/Kg		70	30 - 130
2,4-Dimethylphenol	1670	1113		ug/Kg		67	30 - 130
2,4-Dinitrophenol	1670	968.3		ug/Kg		58	30 - 130
2,4-Dinitrotoluene	1670	1430		ug/Kg		86	40 - 140
2,6-Dinitrotoluene	1670	1332		ug/Kg		80	40 - 140
2-Chloronaphthalene	1670	1284		ug/Kg		77	40 - 140
2-Chlorophenol	1670	1209		ug/Kg		73	30 - 130
2-Methylphenol	1670	1235		ug/Kg		74	30 - 130
2-Nitroaniline	1670	987.5		ug/Kg		59	40 - 140
2-Nitrophenol	1670	1130		ug/Kg		68	30 - 130
3 & 4 Methylphenol	1670	1243		ug/Kg		75	30 - 130
3,3'-Dichlorobenzidine	1670	1636		ug/Kg		98	40 - 140
3-Nitroaniline	1670	733.0		ug/Kg		44	40 - 140
4,6-Dinitro-2-methylphenol	1670	1157		ug/Kg		69	30 - 130
4-Bromophenyl phenyl ether	1670	1330		ug/Kg		80	40 - 140
4-Chloro-3-methylphenol	1670	1303		ug/Kg		78	30 - 130
4-Chloroaniline	1670	520.8	*-	ug/Kg		31	40 - 140
4-Chlorophenyl phenyl ether	1670	1380		ug/Kg		83	40 - 140
4-Nitroaniline	1670	929.3		ug/Kg		56	40 - 140
4-Nitrophenol	1670	1315		ug/Kg		79	30 - 130
Acetophenone	1670	1179		ug/Kg		71	40 - 140
Aniline	1670	606.8	*-	ug/Kg		36	40 - 140
Azobenzene/Diphenyldiazene	1670	885.0		ug/Kg		53	40 - 140
Benzidine	1670	399.0	J *-	ug/Kg		24	40 - 140
Benzoic acid	1670	443.3	*-	ug/Kg		27	30 - 130
Benzyl alcohol	1670	1074		ug/Kg		64	40 - 140
Bis(2-chloroethoxy)methane	1670	1054		ug/Kg		63	40 - 140
Bis(2-chloroethyl)ether	1670	1117		ug/Kg		67	40 - 140
bis (2-chloroisopropyl) ether	1670	998.5		ug/Kg		60	40 - 140
Bis(2-ethylhexyl) phthalate	1670	1399		ug/Kg		84	40 - 140
Butyl benzyl phthalate	1670	1403		ug/Kg		84	40 - 140
Carbazole	1670	951.1		ug/Kg		57	40 - 140
Dibenzofuran	1670	1326		ug/Kg		80	40 - 140
Diethyl phthalate	1670	1365		ug/Kg		82	40 - 140

Eurofins New England

QC Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 620-32927/2-A

Matrix: Solid

Analysis Batch: 32951

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 32927

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Dimethyl phthalate	1670	1367		ug/Kg		82	40 - 140
Di-n-butyl phthalate	1670	1373		ug/Kg		82	40 - 140
Di-n-octyl phthalate	1670	1433		ug/Kg		86	40 - 140
Hexachlorobenzene	1670	1358		ug/Kg		81	40 - 140
Hexachlorobutadiene	1670	1008		ug/Kg		61	40 - 140
Hexachlorocyclopentadiene	1670	974.9		ug/Kg		58	40 - 140
Hexachloroethane	1670	1115		ug/Kg		67	40 - 140
Isophorone	1670	1043		ug/Kg		63	40 - 140
Nitrobenzene	1670	1166		ug/Kg		70	40 - 140
N-Nitrosodimethylamine	1670	824.2		ug/Kg		49	40 - 140
N-Nitrosodi-n-propylamine	1670	1231		ug/Kg		74	40 - 140
N-Nitrosodiphenylamine	1670	1452		ug/Kg		87	40 - 140
Pentachloronitrobenzene	1670	1479		ug/Kg		89	40 - 140
Pentachlorophenol	1670	1067		ug/Kg		64	30 - 130
Phenol	1670	1197		ug/Kg		72	40 - 140
Pyridine	1670	582.1	*-	ug/Kg		35	40 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl (Surr)	75		30 - 130
2-Fluorophenol (Surr)	75		15 - 110
Nitrobenzene-d5 (Surr)	71		30 - 130
Phenol-d5 (Surr)	76		15 - 110
2,4,6-Tribromophenol (Surr)	77		15 - 110
Terphenyl-d14 (Surr)	77		30 - 130

Lab Sample ID: LCSD 620-32927/3-A

Matrix: Solid

Analysis Batch: 32951

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 32927

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2,4,5-Tetrachlorobenzene	1670	1135		ug/Kg		68	40 - 140	3	30
1,2,4-Trichlorobenzene	1670	1061		ug/Kg		64	40 - 140	7	30
1,2-Dichlorobenzene	1670	1074		ug/Kg		64	40 - 140	4	30
1,3-Dichlorobenzene	1670	1105		ug/Kg		66	40 - 140	6	30
1,4-Dichlorobenzene	1670	1110		ug/Kg		67	40 - 140	3	30
2,4,5-Trichlorophenol	1670	1186		ug/Kg		71	30 - 130	0	30
2,4,6-Trichlorophenol	1670	1295		ug/Kg		78	30 - 130	2	30
2,4-Dichlorophenol	1670	1129		ug/Kg		68	30 - 130	3	30
2,4-Dimethylphenol	1670	1091		ug/Kg		65	30 - 130	2	30
2,4-Dinitrophenol	1670	994.5		ug/Kg		60	30 - 130	3	30
2,4-Dinitrotoluene	1670	1436		ug/Kg		86	40 - 140	0	30
2,6-Dinitrotoluene	1670	1348		ug/Kg		81	40 - 140	1	30
2-Chloronaphthalene	1670	1240		ug/Kg		74	40 - 140	3	30
2-Chlorophenol	1670	1173		ug/Kg		70	30 - 130	3	30
2-Methylphenol	1670	1206		ug/Kg		72	30 - 130	2	30
2-Nitroaniline	1670	994.4		ug/Kg		60	40 - 140	1	30
2-Nitrophenol	1670	1066		ug/Kg		64	30 - 130	6	30
3 & 4 Methylphenol	1670	1217		ug/Kg		73	30 - 130	2	30

Eurofins New England

QC Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 620-32927/3-A

Matrix: Solid

Analysis Batch: 32951

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 32927

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
3,3'-Dichlorobenzidine	1670	1610		ug/Kg		97	40 - 140	2	30
3-Nitroaniline	1670	716.5		ug/Kg		43	40 - 140	2	30
4,6-Dinitro-2-methylphenol	1670	1193		ug/Kg		72	30 - 130	3	30
4-Bromophenyl phenyl ether	1670	1332		ug/Kg		80	40 - 140	0	30
4-Chloro-3-methylphenol	1670	1264		ug/Kg		76	30 - 130	3	30
4-Chloroaniline	1670	433.8	*-	ug/Kg		26	40 - 140	18	30
4-Chlorophenyl phenyl ether	1670	1388		ug/Kg		83	40 - 140	1	30
4-Nitroaniline	1670	969.4		ug/Kg		58	40 - 140	4	30
4-Nitrophenol	1670	1261		ug/Kg		76	30 - 130	4	30
Acetophenone	1670	1136		ug/Kg		68	40 - 140	4	30
Aniline	1670	545.3	*-	ug/Kg		33	40 - 140	11	30
Azobenzene/Diphenyldiazene	1670	871.0		ug/Kg		52	40 - 140	2	30
Benzidine	1670	391.4	J *-	ug/Kg		23	40 - 140	2	30
Benzoic acid	1670	392.4	*-	ug/Kg		24	30 - 130	12	30
Benzyl alcohol	1670	1052		ug/Kg		63	40 - 140	2	30
Bis(2-chloroethoxy)methane	1670	1011		ug/Kg		61	40 - 140	4	30
Bis(2-chloroethyl)ether	1670	1081		ug/Kg		65	40 - 140	3	30
bis (2-chloroisopropyl) ether	1670	972.2		ug/Kg		58	40 - 140	3	30
Bis(2-ethylhexyl) phthalate	1670	1465		ug/Kg		88	40 - 140	5	30
Butyl benzyl phthalate	1670	1454		ug/Kg		87	40 - 140	4	30
Carbazole	1670	987.3		ug/Kg		59	40 - 140	4	30
Dibenzofuran	1670	1342		ug/Kg		81	40 - 140	1	30
Diethyl phthalate	1670	1398		ug/Kg		84	40 - 140	2	30
Dimethyl phthalate	1670	1360		ug/Kg		82	40 - 140	0	30
Di-n-butyl phthalate	1670	1404		ug/Kg		84	40 - 140	2	30
Di-n-octyl phthalate	1670	1511		ug/Kg		91	40 - 140	5	30
Hexachlorobenzene	1670	1372		ug/Kg		82	40 - 140	1	30
Hexachlorobutadiene	1670	945.1		ug/Kg		57	40 - 140	6	30
Hexachlorocyclopentadiene	1670	956.8		ug/Kg		57	40 - 140	2	30
Hexachloroethane	1670	1065		ug/Kg		64	40 - 140	5	30
Isophorone	1670	990.8		ug/Kg		59	40 - 140	5	30
Nitrobenzene	1670	1108		ug/Kg		66	40 - 140	5	30
N-Nitrosodimethylamine	1670	813.7		ug/Kg		49	40 - 140	1	30
N-Nitrosodi-n-propylamine	1670	1218		ug/Kg		73	40 - 140	1	30
N-Nitrosodiphenylamine	1670	1454		ug/Kg		87	40 - 140	0	30
Pentachloronitrobenzene	1670	1494		ug/Kg		90	40 - 140	1	30
Pentachlorophenol	1670	1098		ug/Kg		66	30 - 130	3	30
Phenol	1670	1189		ug/Kg		71	40 - 140	1	30
Pyridine	1670	550.5	*-	ug/Kg		33	40 - 140	6	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Fluorobiphenyl (Surr)	73		30 - 130
2-Fluorophenol (Surr)	75		15 - 110
Nitrobenzene-d5 (Surr)	68		30 - 130
Phenol-d5 (Surr)	75		15 - 110
2,4,6-Tribromophenol (Surr)	79		15 - 110
Terphenyl-d14 (Surr)	85		30 - 130

Eurofins New England

QC Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Lab Sample ID: MB 620-32927/1-A

Matrix: Solid

Analysis Batch: 32952

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 32927

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		16.0	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Acenaphthylene	ND		16.0	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
1-Methylnaphthalene	ND		16.0	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Anthracene	ND		16.0	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Benzo[a]anthracene	ND		16.0	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Benzo[a]pyrene	ND		16.0	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Benzo[b]fluoranthene	ND		16.0	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Benzo[g,h,i]perylene	ND		16.0	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Benzo[k]fluoranthene	ND		16.0	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Chrysene	ND		16.0	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Dibenz(a,h)anthracene	ND		16.0	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Fluoranthene	ND		16.0	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Fluorene	ND		16.0	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Indeno[1,2,3-cd]pyrene	ND		16.0	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
2-Methylnaphthalene	ND		16.0	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Naphthalene	ND		16.0	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Phenanthrene	ND		16.0	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Pyrene	ND		16.0	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Bis(2-ethylhexyl) phthalate	ND		33.3	ug/Kg		03/21/24 08:36	03/21/24 13:46	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	55		30 - 130	03/21/24 08:36	03/21/24 13:46	1
Terphenyl-d14 (Surr)	86		30 - 130	03/21/24 08:36	03/21/24 13:46	1
2-Fluorobiphenyl (Surr)	57		30 - 130	03/21/24 08:36	03/21/24 13:46	1

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

Lab Sample ID: MB 620-32878/1-A

Matrix: Solid

Analysis Batch: 32965

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 32878

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TEPH (C9-C36)	ND		13.3	mg/Kg		03/19/24 17:07	03/21/24 13:42	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane (Surr)	58		40 - 140	03/19/24 17:07	03/21/24 13:42	1
o-Terphenyl (Surr)	55		40 - 140	03/19/24 17:07	03/21/24 13:42	1

Lab Sample ID: LCS 620-32878/2-A

Matrix: Solid

Analysis Batch: 32965

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 32878

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
TEPH (C9-C36)	360	274.4		mg/Kg		76	30 - 100

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctadecane (Surr)	84		40 - 140
o-Terphenyl (Surr)	79		40 - 140

Eurofins New England

QC Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

Lab Sample ID: LCSD 620-32878/3-A

Matrix: Solid

Analysis Batch: 32965

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 32878

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
TEPH (C9-C36)	360	215.3		mg/Kg		60	30 - 100	24	30
Surrogate	%Recovery	LCSD Qualifier	Limits						
1-Chlorooctadecane (Surr)	69		40 - 140						
o-Terphenyl (Surr)	64		40 - 140						

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 620-33090/1-A

Matrix: Solid

Analysis Batch: 33178

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 33090

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		1.50	mg/Kg		03/26/24 08:24	03/27/24 14:42	1
Barium	ND		1.00	mg/Kg		03/26/24 08:24	03/27/24 14:42	1
Cadmium	ND		0.500	mg/Kg		03/26/24 08:24	03/27/24 14:42	1
Chromium	ND		1.00	mg/Kg		03/26/24 08:24	03/27/24 14:42	1
Lead	ND		1.50	mg/Kg		03/26/24 08:24	03/27/24 14:42	1
Selenium	ND		1.50	mg/Kg		03/26/24 08:24	03/27/24 14:42	1
Silver	ND		1.50	mg/Kg		03/26/24 08:24	03/27/24 14:42	1

Lab Sample ID: LCSSRM 620-33090/2-A

Matrix: Solid

Analysis Batch: 33178

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 33090

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	223	189.0		mg/Kg		84.8	70.4 - 102.2
Barium	445	462.6		mg/Kg		104.0	78.0 - 110.8
Cadmium	226	235.6		mg/Kg		104.3	73.9 - 104.9
Chromium	230	206.4		mg/Kg		89.7	73.5 - 107.0
Lead	275	266.9		mg/Kg		97.1	74.2 - 108.0
Selenium	137	127.0		mg/Kg		92.7	70.9 - 108.8
Silver	75.3	58.60		mg/Kg		77.8	72.0 - 110.1

Lab Sample ID: 620-17450-7 MS

Matrix: Solid

Analysis Batch: 33178

Client Sample ID: Comp (0-5)

Prep Type: Total/NA

Prep Batch: 33090

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	ND	F1	100	75.72	F1	mg/Kg	⊛	73	75 - 125
Cadmium	ND		100	79.83		mg/Kg	⊛	80	75 - 125
Chromium	13.6	F1	100	86.58	F1	mg/Kg	⊛	73	75 - 125
Lead	21.0		100	98.74		mg/Kg	⊛	78	75 - 125
Selenium	ND	F1	100	72.55	F1	mg/Kg	⊛	73	75 - 125

Eurofins New England

QC Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: 6010D - Metals (ICP) (Continued)

Lab Sample ID: 620-17450-7 MS

Matrix: Solid

Analysis Batch: 33178

Client Sample ID: Comp (0-5)

Prep Type: Total/NA

Prep Batch: 33090

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	ND	F1	100	46.65	F1	mg/Kg	✱	47	75 - 125

Lab Sample ID: 620-17450-7 MSD

Matrix: Solid

Analysis Batch: 33178

Client Sample ID: Comp (0-5)

Prep Type: Total/NA

Prep Batch: 33090

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Arsenic	ND	F1	92.8	85.32		mg/Kg	✱	89	75 - 125	12	20
Barium	45.9		92.8	147.8		mg/Kg	✱	110	75 - 125	6	20
Cadmium	ND		92.8	88.13		mg/Kg	✱	95	75 - 125	10	20
Chromium	13.6	F1	92.8	95.99		mg/Kg	✱	89	75 - 125	10	20
Lead	21.0		92.8	101.7		mg/Kg	✱	87	75 - 125	3	20
Selenium	ND	F1	92.8	80.90		mg/Kg	✱	87	75 - 125	11	20
Silver	ND	F1	92.9	44.43	F1	mg/Kg	✱	48	75 - 125	5	20

Lab Sample ID: 620-17450-7 DU

Matrix: Solid

Analysis Batch: 33178

Client Sample ID: Comp (0-5)

Prep Type: Total/NA

Prep Batch: 33090

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Arsenic	ND	F1	ND		mg/Kg	✱	NC	20
Cadmium	ND		ND		mg/Kg	✱	NC	20
Chromium	13.6	F1	12.73		mg/Kg	✱	7	20
Lead	21.0		25.81		mg/Kg	✱	20	20
Selenium	ND	F1	ND		mg/Kg	✱	NC	20
Silver	ND	F1	ND		mg/Kg	✱	NC	20

Lab Sample ID: MB 620-33121/1-A

Matrix: Solid

Analysis Batch: 33178

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 33121

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0150	mg/L		03/26/24 15:40	03/27/24 13:11	1

Lab Sample ID: LCS 620-33121/2-A

Matrix: Solid

Analysis Batch: 33178

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 33121

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	2.00	1.976		mg/L		99	80 - 120

Lab Sample ID: LB 620-32864/1-B

Matrix: Solid

Analysis Batch: 33178

Client Sample ID: Method Blank

Prep Type: TCLP

Prep Batch: 33121

Analyte	LB Result	LB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0150	mg/L		03/26/24 15:40	03/27/24 13:59	1

Eurofins New England

QC Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: 6010D - Metals (ICP) (Continued)

Lab Sample ID: 620-17450-8 MS
Matrix: Solid
Analysis Batch: 33178

Client Sample ID: Comp (5-10)
Prep Type: TCLP
Prep Batch: 33121

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Lead	ND		2.00	1.724		mg/L		86	75 - 125		

Lab Sample ID: 620-17450-8 MSD
Matrix: Solid
Analysis Batch: 33178

Client Sample ID: Comp (5-10)
Prep Type: TCLP
Prep Batch: 33121

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lead	ND		2.00	1.767		mg/L		88	75 - 125	2	20

Lab Sample ID: 620-17450-8 DU
Matrix: Solid
Analysis Batch: 33178

Client Sample ID: Comp (5-10)
Prep Type: TCLP
Prep Batch: 33121

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Lead	ND			ND		mg/L				NC	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 620-32865/1-A
Matrix: Solid
Analysis Batch: 32883

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 32865

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0500	mg/Kg		03/19/24 11:28	03/19/24 15:14	1

Lab Sample ID: LCSSRM 620-32865/2-A ^20
Matrix: Solid
Analysis Batch: 32883

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 32865

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	25.5	22.86		mg/Kg		89.6	71.4 - 125.1		

Method: 1010A - Ignitability, Pensky-Martens Closed-Cup Method

Lab Sample ID: LCS 410-485688/1
Matrix: Solid
Analysis Batch: 485688

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Flashpoint	81.0	80.00		Degrees F		99	96.9 - 103.1		

Lab Sample ID: LCSD 410-485688/2
Matrix: Solid
Analysis Batch: 485688

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Flashpoint	81.0	79.00		Degrees F		98	96.9 - 103.1	1	4

Eurofins New England

QC Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: 9012 - Cyanide, Reactive

Lab Sample ID: MB 410-486607/1-A

Matrix: Solid

Analysis Batch: 486903

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 486607

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Reactive	ND		60.0	mg/Kg		03/25/24 08:25	03/25/24 16:36	1

Lab Sample ID: LCS 410-486607/2-A

Matrix: Solid

Analysis Batch: 486903

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 486607

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Reactive	1000	ND		mg/Kg		3	0 - 5.14

Lab Sample ID: LCSD 410-486607/3-A

Matrix: Solid

Analysis Batch: 486903

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 486607

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Cyanide, Reactive	1000	ND		mg/Kg		3	0 - 5.14	11	11

Method: 9034 - Sulfide, Reactive

Lab Sample ID: MB 410-486607/1-A

Matrix: Solid

Analysis Batch: 486731

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 486607

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide, Reactive	ND		160	mg/Kg		03/25/24 08:25	03/25/24 12:45	1

Lab Sample ID: LCS 410-486607/26-A

Matrix: Solid

Analysis Batch: 486731

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 486607

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide, Reactive	538	394.3		mg/Kg		73	62 - 104

Lab Sample ID: LCSD 410-486607/27-A

Matrix: Solid

Analysis Batch: 486731

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 486607

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Sulfide, Reactive	538	404.2		mg/Kg		75	62 - 104	2	21

Method: 9045D - pH

Lab Sample ID: LCDSRM 620-33213/6

Matrix: Solid

Analysis Batch: 33213

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
pH	6.00	6.1		SU		100.8	97.5 - 102.5	1	5

Eurofins New England

QC Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: 9045D - pH (Continued)

Lab Sample ID: LCSSRM 620-33213/5
Matrix: Solid
Analysis Batch: 33213

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
pH	6.00	6.0		SU		100.2	97.5 - 102.5

Lab Sample ID: MB 620-33195/1-A
Matrix: Solid
Analysis Batch: 33213

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.6			SU			03/28/24 11:32	1
Temperature	23.4			Degrees C			03/28/24 11:32	1

Lab Sample ID: 620-17450-7 DU
Matrix: Solid
Analysis Batch: 33213

Client Sample ID: Comp (0-5)
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	8.4		8.6		SU		2	5
Temperature	23.4		23.4		Degrees C		0	5

Method: 9060 - Organic Carbon, Total (TOC)

Lab Sample ID: MB 410-485914/4
Matrix: Solid
Analysis Batch: 485914

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	ND		300	mg/Kg			03/21/24 12:15	1

Lab Sample ID: LCS 410-485914/3
Matrix: Solid
Analysis Batch: 485914

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon	3920	4950		mg/Kg		126	36 - 163

Lab Sample ID: 620-17450-7 MS
Matrix: Solid
Analysis Batch: 485914

Client Sample ID: Comp (0-5)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon	4780	F1	177000	24340	F1	mg/Kg		11	36 - 163

Lab Sample ID: 620-17450-7 MSD
Matrix: Solid
Analysis Batch: 485914

Client Sample ID: Comp (0-5)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Organic Carbon	4780	F1	17500	23530		mg/Kg		107	36 - 163	3	20

Eurofins New England

QC Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: SM 2510B - Conductivity, Specific Conductance

Lab Sample ID: LCDSRM 620-33209/3
Matrix: Solid
Analysis Batch: 33209

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Specific Conductance	1410	1405		uS/cm		99.4	95.0 - 105.0	0	20

Lab Sample ID: LCSSRM 620-33209/2
Matrix: Solid
Analysis Batch: 33209

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Specific Conductance	1410	1402		uS/cm		99.2	95.0 - 105.0	0	

Lab Sample ID: MB 620-33195/1-A
Matrix: Solid
Analysis Batch: 33209

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	ND		10.0	uS/cm			03/28/24 11:04	1

Lab Sample ID: 620-17450-7 DU
Matrix: Solid
Analysis Batch: 33209

Client Sample ID: Comp (0-5)
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Specific Conductance	1200		1171		uS/cm		2	5

QC Association Summary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

GC/MS VOA

Pre Prep Batch: 32834

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-1	ATC-3 (0-5)	Total/NA	Solid	Frozen Preserve	
620-17450-2	ATC-3 (5-10)	Total/NA	Solid	Frozen Preserve	
620-17450-3	ATC-2 (0-5)	Total/NA	Solid	Frozen Preserve	
620-17450-4	ATC-2 (5-10)	Total/NA	Solid	Frozen Preserve	
620-17450-5	ATC-1 (0-5)	Total/NA	Solid	Frozen Preserve	
620-17450-6	ATC-1 (5-10)	Total/NA	Solid	Frozen Preserve	
620-17450-9	ATC-8 (0-5)	Total/NA	Solid	Frozen Preserve	
620-17450-10	ATC-8 (5-10)	Total/NA	Solid	Frozen Preserve	
620-17450-11	ATC-7 (0-5)	Total/NA	Solid	Frozen Preserve	
620-17450-12	ATC-7 (5-10)	Total/NA	Solid	Frozen Preserve	
620-17450-13	ATC-6 (0-5)	Total/NA	Solid	Frozen Preserve	
620-17450-14	ATC-6 (5-10)	Total/NA	Solid	Frozen Preserve	
620-17450-15	ATC-4 (0-5)	Total/NA	Solid	Frozen Preserve	
620-17450-16	ATC-4 (5-10)	Total/NA	Solid	Frozen Preserve	
620-17450-17	ATC-5 (0-5)	Total/NA	Solid	Frozen Preserve	
620-17450-18	ATC-5 (5-10)	Total/NA	Solid	Frozen Preserve	

Prep Batch: 33086

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-1	ATC-3 (0-5)	Total/NA	Solid	5035	32834
620-17450-2	ATC-3 (5-10)	Total/NA	Solid	5035	32834
620-17450-3	ATC-2 (0-5)	Total/NA	Solid	5035	32834
620-17450-4	ATC-2 (5-10)	Total/NA	Solid	5035	32834
620-17450-5	ATC-1 (0-5)	Total/NA	Solid	5035	32834
620-17450-6	ATC-1 (5-10)	Total/NA	Solid	5035	32834
620-17450-9	ATC-8 (0-5)	Total/NA	Solid	5035	32834
620-17450-10	ATC-8 (5-10)	Total/NA	Solid	5035	32834
620-17450-11	ATC-7 (0-5)	Total/NA	Solid	5035	32834
620-17450-12	ATC-7 (5-10)	Total/NA	Solid	5035	32834
620-17450-13	ATC-6 (0-5)	Total/NA	Solid	5035	32834
620-17450-14	ATC-6 (5-10)	Total/NA	Solid	5035	32834
620-17450-15	ATC-4 (0-5)	Total/NA	Solid	5035	32834
620-17450-16	ATC-4 (5-10)	Total/NA	Solid	5035	32834
620-17450-17	ATC-5 (0-5)	Total/NA	Solid	5035	32834
620-17450-18	ATC-5 (5-10)	Total/NA	Solid	5035	32834
MB 620-33086/3-A	Method Blank	Total/NA	Solid	5035	
LCS 620-33086/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 620-33086/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Eurofins New England

QC Association Summary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

GC/MS VOA

Analysis Batch: 33087

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-1	ATC-3 (0-5)	Total/NA	Solid	8260C	33086
620-17450-2	ATC-3 (5-10)	Total/NA	Solid	8260C	33086
620-17450-3	ATC-2 (0-5)	Total/NA	Solid	8260C	33086
620-17450-4	ATC-2 (5-10)	Total/NA	Solid	8260C	33086
620-17450-5	ATC-1 (0-5)	Total/NA	Solid	8260C	33086
620-17450-6	ATC-1 (5-10)	Total/NA	Solid	8260C	33086
620-17450-9	ATC-8 (0-5)	Total/NA	Solid	8260C	33086
620-17450-10	ATC-8 (5-10)	Total/NA	Solid	8260C	33086
620-17450-11	ATC-7 (0-5)	Total/NA	Solid	8260C	33086
620-17450-12	ATC-7 (5-10)	Total/NA	Solid	8260C	33086
620-17450-13	ATC-6 (0-5)	Total/NA	Solid	8260C	33086
620-17450-14	ATC-6 (5-10)	Total/NA	Solid	8260C	33086
620-17450-15	ATC-4 (0-5)	Total/NA	Solid	8260C	33086
620-17450-16	ATC-4 (5-10)	Total/NA	Solid	8260C	33086
620-17450-17	ATC-5 (0-5)	Total/NA	Solid	8260C	33086
620-17450-18	ATC-5 (5-10)	Total/NA	Solid	8260C	33086
MB 620-33086/3-A	Method Blank	Total/NA	Solid	8260C	33086
LCS 620-33086/1-A	Lab Control Sample	Total/NA	Solid	8260C	33086
LCSD 620-33086/2-A	Lab Control Sample Dup	Total/NA	Solid	8260C	33086

GC/MS Semi VOA

Prep Batch: 32927

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	Total/NA	Solid	3546	
620-17450-8	Comp (5-10)	Total/NA	Solid	3546	
MB 620-32927/1-A	Method Blank	Total/NA	Solid	3546	
LCS 620-32927/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 620-32927/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	

Analysis Batch: 32951

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	Total/NA	Solid	8270D	32927
620-17450-8	Comp (5-10)	Total/NA	Solid	8270D	32927
MB 620-32927/1-A	Method Blank	Total/NA	Solid	8270D	32927
LCS 620-32927/2-A	Lab Control Sample	Total/NA	Solid	8270D	32927
LCSD 620-32927/3-A	Lab Control Sample Dup	Total/NA	Solid	8270D	32927

Analysis Batch: 32952

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	Total/NA	Solid	8270D_LL_PAH	32927
620-17450-8	Comp (5-10)	Total/NA	Solid	8270D_LL_PAH	32927
MB 620-32927/1-A	Method Blank	Total/NA	Solid	8270D_LL_PAH	32927

GC Semi VOA

Prep Batch: 32873

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	Total/NA	Solid	3540C	
620-17450-8	Comp (5-10)	Total/NA	Solid	3540C	

Eurofins New England

QC Association Summary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

GC Semi VOA

Prep Batch: 32878

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	Total/NA	Solid	3546	
620-17450-8	Comp (5-10)	Total/NA	Solid	3546	
MB 620-32878/1-A	Method Blank	Total/NA	Solid	3546	
LCS 620-32878/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 620-32878/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	

Analysis Batch: 32965

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	Total/NA	Solid	8100	32878
620-17450-8	Comp (5-10)	Total/NA	Solid	8100	32878
MB 620-32878/1-A	Method Blank	Total/NA	Solid	8100	32878
LCS 620-32878/2-A	Lab Control Sample	Total/NA	Solid	8100	32878
LCSD 620-32878/3-A	Lab Control Sample Dup	Total/NA	Solid	8100	32878

Analysis Batch: 32987

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	Total/NA	Solid	8082	32873
620-17450-8	Comp (5-10)	Total/NA	Solid	8082	32873

Metals

Leach Batch: 32864

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	TCLP	Solid	1311	
620-17450-8	Comp (5-10)	TCLP	Solid	1311	
LB 620-32864/1-B	Method Blank	TCLP	Solid	1311	
620-17450-8 MS	Comp (5-10)	TCLP	Solid	1311	
620-17450-8 MSD	Comp (5-10)	TCLP	Solid	1311	
620-17450-8 DU	Comp (5-10)	TCLP	Solid	1311	

Prep Batch: 32865

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	Total/NA	Solid	7471B	
620-17450-8	Comp (5-10)	Total/NA	Solid	7471B	
MB 620-32865/1-A	Method Blank	Total/NA	Solid	7471B	
LCSSRM 620-32865/2-A ^20	Lab Control Sample	Total/NA	Solid	7471B	

Analysis Batch: 32883

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	Total/NA	Solid	7471A	32865
620-17450-8	Comp (5-10)	Total/NA	Solid	7471A	32865
MB 620-32865/1-A	Method Blank	Total/NA	Solid	7471A	32865
LCSSRM 620-32865/2-A ^20	Lab Control Sample	Total/NA	Solid	7471A	32865

Prep Batch: 33090

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	Total/NA	Solid	3050B	
620-17450-8	Comp (5-10)	Total/NA	Solid	3050B	
MB 620-33090/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 620-33090/2-A	Lab Control Sample	Total/NA	Solid	3050B	
620-17450-7 MS	Comp (0-5)	Total/NA	Solid	3050B	

Eurofins New England

QC Association Summary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Metals (Continued)

Prep Batch: 33090 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7 MSD	Comp (0-5)	Total/NA	Solid	3050B	
620-17450-7 DU	Comp (0-5)	Total/NA	Solid	3050B	

Prep Batch: 33121

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	TCLP	Solid	3010A	32864
620-17450-8	Comp (5-10)	TCLP	Solid	3010A	32864
LB 620-32864/1-B	Method Blank	TCLP	Solid	3010A	32864
MB 620-33121/1-A	Method Blank	Total/NA	Solid	3010A	
LCS 620-33121/2-A	Lab Control Sample	Total/NA	Solid	3010A	
620-17450-8 MS	Comp (5-10)	TCLP	Solid	3010A	32864
620-17450-8 MSD	Comp (5-10)	TCLP	Solid	3010A	32864
620-17450-8 DU	Comp (5-10)	TCLP	Solid	3010A	32864

Analysis Batch: 33178

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	TCLP	Solid	6010D	33121
620-17450-7	Comp (0-5)	Total/NA	Solid	6010D	33090
620-17450-8	Comp (5-10)	TCLP	Solid	6010D	33121
620-17450-8	Comp (5-10)	Total/NA	Solid	6010D	33090
LB 620-32864/1-B	Method Blank	TCLP	Solid	6010D	33121
MB 620-33090/1-A	Method Blank	Total/NA	Solid	6010D	33090
MB 620-33121/1-A	Method Blank	Total/NA	Solid	6010D	33121
LCS 620-33121/2-A	Lab Control Sample	Total/NA	Solid	6010D	33121
LCSSRM 620-33090/2-A	Lab Control Sample	Total/NA	Solid	6010D	33090
620-17450-7 MS	Comp (0-5)	Total/NA	Solid	6010D	33090
620-17450-7 MSD	Comp (0-5)	Total/NA	Solid	6010D	33090
620-17450-8 MS	Comp (5-10)	TCLP	Solid	6010D	33121
620-17450-8 MSD	Comp (5-10)	TCLP	Solid	6010D	33121
620-17450-7 DU	Comp (0-5)	Total/NA	Solid	6010D	33090
620-17450-8 DU	Comp (5-10)	TCLP	Solid	6010D	33121

General Chemistry

Analysis Batch: 32837

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-1	ATC-3 (0-5)	Total/NA	Solid	Moisture	
620-17450-2	ATC-3 (5-10)	Total/NA	Solid	Moisture	
620-17450-3	ATC-2 (0-5)	Total/NA	Solid	Moisture	
620-17450-4	ATC-2 (5-10)	Total/NA	Solid	Moisture	
620-17450-5	ATC-1 (0-5)	Total/NA	Solid	Moisture	
620-17450-6	ATC-1 (5-10)	Total/NA	Solid	Moisture	
620-17450-7	Comp (0-5)	Total/NA	Solid	Moisture	
620-17450-8	Comp (5-10)	Total/NA	Solid	Moisture	
620-17450-9	ATC-8 (0-5)	Total/NA	Solid	Moisture	
620-17450-10	ATC-8 (5-10)	Total/NA	Solid	Moisture	
620-17450-11	ATC-7 (0-5)	Total/NA	Solid	Moisture	
620-17450-12	ATC-7 (5-10)	Total/NA	Solid	Moisture	
620-17450-13	ATC-6 (0-5)	Total/NA	Solid	Moisture	
620-17450-14	ATC-6 (5-10)	Total/NA	Solid	Moisture	
MB 620-32837/1	Method Blank	Total/NA	Solid	Moisture	

Eurofins New England

QC Association Summary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

General Chemistry (Continued)

Analysis Batch: 32837 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-8 DU	Comp (5-10)	Total/NA	Solid	Moisture	

Analysis Batch: 32858

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-15	ATC-4 (0-5)	Total/NA	Solid	Moisture	
620-17450-16	ATC-4 (5-10)	Total/NA	Solid	Moisture	
620-17450-17	ATC-5 (0-5)	Total/NA	Solid	Moisture	
620-17450-18	ATC-5 (5-10)	Total/NA	Solid	Moisture	
MB 620-32858/1	Method Blank	Total/NA	Solid	Moisture	
620-17450-15 DU	ATC-4 (0-5)	Total/NA	Solid	Moisture	

Leach Batch: 33195

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	Soluble	Solid	DI Leach	
620-17450-8	Comp (5-10)	Soluble	Solid	DI Leach	
MB 620-33195/1-A	Method Blank	Soluble	Solid	DI Leach	
620-17450-7 DU	Comp (0-5)	Soluble	Solid	DI Leach	

Analysis Batch: 33209

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	Soluble	Solid	SM 2510B	33195
620-17450-8	Comp (5-10)	Soluble	Solid	SM 2510B	33195
MB 620-33195/1-A	Method Blank	Soluble	Solid	SM 2510B	33195
LCDSRM 620-33209/3	Lab Control Sample Dup	Total/NA	Solid	SM 2510B	
LCSSRM 620-33209/2	Lab Control Sample	Total/NA	Solid	SM 2510B	
620-17450-7 DU	Comp (0-5)	Soluble	Solid	SM 2510B	33195

Analysis Batch: 33213

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	Soluble	Solid	9045D	33195
620-17450-8	Comp (5-10)	Soluble	Solid	9045D	33195
MB 620-33195/1-A	Method Blank	Soluble	Solid	9045D	33195
LCDSRM 620-33213/6	Lab Control Sample Dup	Total/NA	Solid	9045D	
LCSSRM 620-33213/5	Lab Control Sample	Total/NA	Solid	9045D	
620-17450-7 DU	Comp (0-5)	Soluble	Solid	9045D	33195

Analysis Batch: 485688

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	Total/NA	Solid	1010A	
620-17450-8	Comp (5-10)	Total/NA	Solid	1010A	
LCS 410-485688/1	Lab Control Sample	Total/NA	Solid	1010A	
LCSD 410-485688/2	Lab Control Sample Dup	Total/NA	Solid	1010A	

Analysis Batch: 485914

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	Total/NA	Solid	9060	
620-17450-8	Comp (5-10)	Total/NA	Solid	9060	
MB 410-485914/4	Method Blank	Total/NA	Solid	9060	
LCS 410-485914/3	Lab Control Sample	Total/NA	Solid	9060	
620-17450-7 MS	Comp (0-5)	Total/NA	Solid	9060	
620-17450-7 MSD	Comp (0-5)	Total/NA	Solid	9060	

Eurofins New England

QC Association Summary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

General Chemistry

Prep Batch: 486607

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	Total/NA	Solid	7.3.4	
620-17450-8	Comp (5-10)	Total/NA	Solid	7.3.4	
MB 410-486607/1-A	Method Blank	Total/NA	Solid	7.3.4	
LCS 410-486607/26-A	Lab Control Sample	Total/NA	Solid	7.3.4	
LCS 410-486607/2-A	Lab Control Sample	Total/NA	Solid	7.3.4	
LCSD 410-486607/27-A	Lab Control Sample Dup	Total/NA	Solid	7.3.4	
LCSD 410-486607/3-A	Lab Control Sample Dup	Total/NA	Solid	7.3.4	

Analysis Batch: 486731

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	Total/NA	Solid	9034	486607
620-17450-8	Comp (5-10)	Total/NA	Solid	9034	486607
MB 410-486607/1-A	Method Blank	Total/NA	Solid	9034	486607
LCS 410-486607/26-A	Lab Control Sample	Total/NA	Solid	9034	486607
LCSD 410-486607/27-A	Lab Control Sample Dup	Total/NA	Solid	9034	486607

Analysis Batch: 486903

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	Total/NA	Solid	9012	486607
620-17450-8	Comp (5-10)	Total/NA	Solid	9012	486607
MB 410-486607/1-A	Method Blank	Total/NA	Solid	9012	486607
LCS 410-486607/2-A	Lab Control Sample	Total/NA	Solid	9012	486607
LCSD 410-486607/3-A	Lab Control Sample Dup	Total/NA	Solid	9012	486607

Lab Chronicle

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-3 (0-5)

Date Collected: 03/15/24 09:10

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	32837	MEM	EET NE	03/19/24 07:42

Client Sample ID: ATC-3 (0-5)

Date Collected: 03/15/24 09:10

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-1

Matrix: Solid

Percent Solids: 88.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	Frozen Preserve			32834	KFS	EET NE	03/15/24 15:00
Total/NA	Prep	5035			33086	CLR	EET NE	03/26/24 07:37
Total/NA	Analysis	8260C		1	33087	CLR	EET NE	03/26/24 12:08

Client Sample ID: ATC-3 (5-10)

Date Collected: 03/15/24 09:30

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	32837	MEM	EET NE	03/19/24 07:42

Client Sample ID: ATC-3 (5-10)

Date Collected: 03/15/24 09:30

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-2

Matrix: Solid

Percent Solids: 87.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	Frozen Preserve			32834	KFS	EET NE	03/15/24 15:00
Total/NA	Prep	5035			33086	CLR	EET NE	03/26/24 07:37
Total/NA	Analysis	8260C		1	33087	CLR	EET NE	03/26/24 12:33

Client Sample ID: ATC-2 (0-5)

Date Collected: 03/15/24 10:15

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	32837	MEM	EET NE	03/19/24 07:42

Client Sample ID: ATC-2 (0-5)

Date Collected: 03/15/24 10:15

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-3

Matrix: Solid

Percent Solids: 90.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	Frozen Preserve			32834	KFS	EET NE	03/15/24 15:00
Total/NA	Prep	5035			33086	CLR	EET NE	03/26/24 07:37
Total/NA	Analysis	8260C		1	33087	CLR	EET NE	03/26/24 12:58

Lab Chronicle

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-2 (5-10)

Date Collected: 03/15/24 11:00

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	32837	MEM	EET NE	03/19/24 07:42

Client Sample ID: ATC-2 (5-10)

Date Collected: 03/15/24 11:00

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-4

Matrix: Solid

Percent Solids: 77.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	Frozen Preserve			32834	KFS	EET NE	03/15/24 15:00
Total/NA	Prep	5035			33086	CLR	EET NE	03/26/24 07:37
Total/NA	Analysis	8260C		1	33087	CLR	EET NE	03/26/24 13:23

Client Sample ID: ATC-1 (0-5)

Date Collected: 03/15/24 11:20

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	32837	MEM	EET NE	03/19/24 07:42

Client Sample ID: ATC-1 (0-5)

Date Collected: 03/15/24 11:20

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-5

Matrix: Solid

Percent Solids: 88.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	Frozen Preserve			32834	KFS	EET NE	03/15/24 15:00
Total/NA	Prep	5035			33086	CLR	EET NE	03/26/24 07:37
Total/NA	Analysis	8260C		1	33087	CLR	EET NE	03/26/24 13:49

Client Sample ID: ATC-1 (5-10)

Date Collected: 03/15/24 11:30

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-6

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	32837	MEM	EET NE	03/19/24 07:42

Client Sample ID: ATC-1 (5-10)

Date Collected: 03/15/24 11:30

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-6

Matrix: Solid

Percent Solids: 91.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	Frozen Preserve			32834	KFS	EET NE	03/15/24 15:00
Total/NA	Prep	5035			33086	CLR	EET NE	03/26/24 07:37
Total/NA	Analysis	8260C		1	33087	CLR	EET NE	03/26/24 14:14

Lab Chronicle

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: Comp (0-5)

Date Collected: 03/15/24 12:00

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
TCLP	Leach	1311			32864	MEM	EET NE	03/19/24 10:35 - 03/20/24 09:30 ¹
TCLP	Prep	3010A			33121	JPC	EET NE	03/26/24 15:40
TCLP	Analysis	6010D		1	33178	JPC	EET NE	03/27/24 13:47
Total/NA	Analysis	1010A		1	485688	USAE	ELLE	03/21/24 10:01 - 03/21/24 10:01 ¹
Total/NA	Prep	7.3.4			486607	USE1	ELLE	03/25/24 08:25
Total/NA	Analysis	9012		1	486903	JCG7	ELLE	03/25/24 17:06
Total/NA	Prep	7.3.4			486607	USE1	ELLE	03/25/24 08:25
Total/NA	Analysis	9034		1	486731	USE1	ELLE	03/25/24 12:45
Soluble	Leach	DI Leach			33195	ODO	EET NE	03/28/24 10:08
Soluble	Analysis	9045D		1	33213	ODO	EET NE	03/28/24 11:32
Total/NA	Analysis	9060		1	485914	P684	ELLE	03/21/24 13:08
Total/NA	Analysis	Moisture		1	32837	MEM	EET NE	03/19/24 07:42
Soluble	Leach	DI Leach			33195	ODO	EET NE	03/28/24 10:08
Soluble	Analysis	SM 2510B		1	33209	ODO	EET NE	03/28/24 11:04

Client Sample ID: Comp (0-5)

Date Collected: 03/15/24 12:00

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-7

Matrix: Solid

Percent Solids: 87.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3546			32927	JAC	EET NE	03/21/24 08:36
Total/NA	Analysis	8270D		1	32951	JS	EET NE	03/21/24 15:49
Total/NA	Prep	3546			32927	JAC	EET NE	03/21/24 08:36
Total/NA	Analysis	8270D_LL_PAH		1	32952	JS	EET NE	03/21/24 15:49
Total/NA	Prep	3540C			32873	JAC	EET NE	03/19/24 14:48
Total/NA	Analysis	8082		1	32987	BMH	EET NE	03/21/24 23:56
Total/NA	Prep	3546			32878	JAC	EET NE	03/19/24 17:07
Total/NA	Analysis	8100		1	32965	JS	EET NE	03/21/24 15:35
Total/NA	Prep	3050B			33090	PRB	EET NE	03/26/24 08:24
Total/NA	Analysis	6010D		2	33178	JPC	EET NE	03/27/24 14:54
Total/NA	Prep	7471B			32865	PRB	EET NE	03/19/24 11:28
Total/NA	Analysis	7471A		1	32883	PRB	EET NE	03/19/24 15:44

Client Sample ID: Comp (5-10)

Date Collected: 03/15/24 12:15

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-8

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
TCLP	Leach	1311			32864	MEM	EET NE	03/19/24 10:35 - 03/20/24 09:30 ¹
TCLP	Prep	3010A			33121	JPC	EET NE	03/26/24 15:40
TCLP	Analysis	6010D		1	33178	JPC	EET NE	03/27/24 13:23
Total/NA	Analysis	1010A		1	485688	USAE	ELLE	03/21/24 10:01 - 03/21/24 10:01 ¹
Total/NA	Prep	7.3.4			486607	USE1	ELLE	03/25/24 08:25
Total/NA	Analysis	9012		1	486903	JCG7	ELLE	03/25/24 17:07

Eurofins New England

Lab Chronicle

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: Comp (5-10)

Date Collected: 03/15/24 12:15

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-8

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7.3.4			486607	USE1	ELLE	03/25/24 08:25
Total/NA	Analysis	9034		1	486731	USE1	ELLE	03/25/24 12:45
Soluble	Leach	DI Leach			33195	ODO	EET NE	03/28/24 10:08
Soluble	Analysis	9045D		1	33213	ODO	EET NE	03/28/24 11:32
Total/NA	Analysis	9060		1	485914	P684	ELLE	03/21/24 13:29
Total/NA	Analysis	Moisture		1	32837	MEM	EET NE	03/19/24 07:42
Soluble	Leach	DI Leach			33195	ODO	EET NE	03/28/24 10:08
Soluble	Analysis	SM 2510B		1	33209	ODO	EET NE	03/28/24 11:04

Client Sample ID: Comp (5-10)

Date Collected: 03/15/24 12:15

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-8

Matrix: Solid

Percent Solids: 87.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3546			32927	JAC	EET NE	03/21/24 08:36
Total/NA	Analysis	8270D		1	32951	JS	EET NE	03/21/24 16:14
Total/NA	Prep	3546			32927	JAC	EET NE	03/21/24 08:36
Total/NA	Analysis	8270D_LL_PAH		1	32952	JS	EET NE	03/21/24 16:14
Total/NA	Prep	3540C			32873	JAC	EET NE	03/19/24 14:48
Total/NA	Analysis	8082		1	32987	BMH	EET NE	03/22/24 00:14
Total/NA	Prep	3546			32878	JAC	EET NE	03/19/24 17:07
Total/NA	Analysis	8100		1	32965	JS	EET NE	03/21/24 15:57
Total/NA	Prep	3050B			33090	PRB	EET NE	03/26/24 08:24
Total/NA	Analysis	6010D		2	33178	JPC	EET NE	03/27/24 15:18
Total/NA	Prep	7471B			32865	PRB	EET NE	03/19/24 11:28
Total/NA	Analysis	7471A		1	32883	PRB	EET NE	03/19/24 15:46

Client Sample ID: ATC-8 (0-5)

Date Collected: 03/14/24 10:00

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-9

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	32837	MEM	EET NE	03/19/24 07:42

Client Sample ID: ATC-8 (0-5)

Date Collected: 03/14/24 10:00

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-9

Matrix: Solid

Percent Solids: 88.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	Frozen Preserve			32834	KFS	EET NE	03/14/24 15:00
Total/NA	Prep	5035			33086	CLR	EET NE	03/26/24 07:37
Total/NA	Analysis	8260C		1	33087	CLR	EET NE	03/26/24 14:40

Eurofins New England

Lab Chronicle

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-8 (5-10)

Date Collected: 03/14/24 11:50

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-10

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	32837	MEM	EET NE	03/19/24 07:42

Client Sample ID: ATC-8 (5-10)

Date Collected: 03/14/24 11:50

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-10

Matrix: Solid

Percent Solids: 77.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	Frozen Preserve			32834	KFS	EET NE	03/14/24 15:00
Total/NA	Prep	5035			33086	CLR	EET NE	03/26/24 07:37
Total/NA	Analysis	8260C		1	33087	CLR	EET NE	03/26/24 15:06

Client Sample ID: ATC-7 (0-5)

Date Collected: 03/14/24 11:10

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-11

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	32837	MEM	EET NE	03/19/24 07:42

Client Sample ID: ATC-7 (0-5)

Date Collected: 03/14/24 11:10

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-11

Matrix: Solid

Percent Solids: 91.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	Frozen Preserve			32834	KFS	EET NE	03/14/24 15:00
Total/NA	Prep	5035			33086	CLR	EET NE	03/26/24 07:37
Total/NA	Analysis	8260C		1	33087	CLR	EET NE	03/26/24 15:31

Client Sample ID: ATC-7 (5-10)

Date Collected: 03/14/24 12:10

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-12

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	32837	MEM	EET NE	03/19/24 07:42

Client Sample ID: ATC-7 (5-10)

Date Collected: 03/14/24 12:10

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-12

Matrix: Solid

Percent Solids: 78.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	Frozen Preserve			32834	KFS	EET NE	03/14/24 15:00
Total/NA	Prep	5035			33086	CLR	EET NE	03/26/24 07:37
Total/NA	Analysis	8260C		1	33087	CLR	EET NE	03/26/24 15:57

Eurofins New England

Lab Chronicle

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-6 (0-5)

Date Collected: 03/14/24 12:30

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-13

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	32837	MEM	EET NE	03/19/24 07:42

Client Sample ID: ATC-6 (0-5)

Date Collected: 03/14/24 12:30

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-13

Matrix: Solid

Percent Solids: 89.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	Frozen Preserve			32834	KFS	EET NE	03/14/24 15:00
Total/NA	Prep	5035			33086	CLR	EET NE	03/26/24 07:37
Total/NA	Analysis	8260C		1	33087	CLR	EET NE	03/26/24 16:24

Client Sample ID: ATC-6 (5-10)

Date Collected: 03/14/24 12:45

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-14

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	32837	MEM	EET NE	03/19/24 07:42

Client Sample ID: ATC-6 (5-10)

Date Collected: 03/14/24 12:45

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-14

Matrix: Solid

Percent Solids: 92.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	Frozen Preserve			32834	KFS	EET NE	03/14/24 15:00
Total/NA	Prep	5035			33086	CLR	EET NE	03/26/24 07:37
Total/NA	Analysis	8260C		1	33087	CLR	EET NE	03/26/24 16:50

Client Sample ID: ATC-4 (0-5)

Date Collected: 03/14/24 13:40

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-15

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	32858	MEM	EET NE	03/19/24 09:21

Client Sample ID: ATC-4 (0-5)

Date Collected: 03/14/24 13:40

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-15

Matrix: Solid

Percent Solids: 89.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	Frozen Preserve			32834	KFS	EET NE	03/14/24 15:00
Total/NA	Prep	5035			33086	CLR	EET NE	03/26/24 07:37
Total/NA	Analysis	8260C		1	33087	CLR	EET NE	03/26/24 17:15

Eurofins New England

Lab Chronicle

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-4 (5-10)

Date Collected: 03/14/24 13:55

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-16

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	32858	MEM	EET NE	03/19/24 09:21

Client Sample ID: ATC-4 (5-10)

Date Collected: 03/14/24 13:55

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-16

Matrix: Solid

Percent Solids: 92.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	Frozen Preserve			32834	KFS	EET NE	03/14/24 15:00
Total/NA	Prep	5035			33086	CLR	EET NE	03/26/24 07:37
Total/NA	Analysis	8260C		1	33087	CLR	EET NE	03/26/24 17:41

Client Sample ID: ATC-5 (0-5)

Date Collected: 03/14/24 14:25

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-17

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	32858	MEM	EET NE	03/19/24 09:21

Client Sample ID: ATC-5 (0-5)

Date Collected: 03/14/24 14:25

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-17

Matrix: Solid

Percent Solids: 89.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	Frozen Preserve			32834	KFS	EET NE	03/14/24 15:00
Total/NA	Prep	5035			33086	CLR	EET NE	03/26/24 07:37
Total/NA	Analysis	8260C		1	33087	CLR	EET NE	03/26/24 18:07

Client Sample ID: ATC-5 (5-10)

Date Collected: 03/14/24 12:10

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-18

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	32858	MEM	EET NE	03/19/24 09:21

Client Sample ID: ATC-5 (5-10)

Date Collected: 03/14/24 12:10

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-18

Matrix: Solid

Percent Solids: 92.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	Frozen Preserve			32834	KFS	EET NE	03/14/24 15:00
Total/NA	Prep	5035			33086	CLR	EET NE	03/26/24 07:37
Total/NA	Analysis	8260C		1	33087	CLR	EET NE	03/26/24 18:33

¹ This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET NE = Eurofins New England, 646 Camp Ave, North Kingstown, RI 02852, TEL (413)789-9018

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Eurofins New England

Accreditation/Certification Summary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Laboratory: Eurofins New England

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Massachusetts	State	M-RI907	06-30-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
6010D	3010A	Solid	Lead
6010D	3050B	Solid	Arsenic
6010D	3050B	Solid	Barium
6010D	3050B	Solid	Cadmium
6010D	3050B	Solid	Chromium
6010D	3050B	Solid	Lead
6010D	3050B	Solid	Selenium
6010D	3050B	Solid	Silver
7471A	7471B	Solid	Mercury
8082	3540C	Solid	PCB-1016
8082	3540C	Solid	PCB-1221
8082	3540C	Solid	PCB-1232
8082	3540C	Solid	PCB-1242
8082	3540C	Solid	PCB-1248
8082	3540C	Solid	PCB-1254
8082	3540C	Solid	PCB-1260
8082	3540C	Solid	PCB-1262
8082	3540C	Solid	PCB-1268
8100	3546	Solid	TEPH (C9-C36)
8260C	5035	Solid	1,1,1,2-Tetrachloroethane
8260C	5035	Solid	1,1,1-Trichloroethane
8260C	5035	Solid	1,1,2,2-Tetrachloroethane
8260C	5035	Solid	1,1,2-Trichloroethane
8260C	5035	Solid	1,1,2-Trichlorotrifluoroethane (Freon 113)
8260C	5035	Solid	1,1-Dichloroethane
8260C	5035	Solid	1,1-Dichloroethene
8260C	5035	Solid	1,1-Dichloropropene
8260C	5035	Solid	1,2,3-Trichlorobenzene
8260C	5035	Solid	1,2,3-Trichloropropane
8260C	5035	Solid	1,2,4-Trichlorobenzene
8260C	5035	Solid	1,2,4-Trimethylbenzene
8260C	5035	Solid	1,2-Dibromo-3-Chloropropane
8260C	5035	Solid	1,2-Dibromoethane (EDB)
8260C	5035	Solid	1,2-Dichlorobenzene
8260C	5035	Solid	1,2-Dichloroethane
8260C	5035	Solid	1,2-Dichloropropane
8260C	5035	Solid	1,3,5-Trichlorobenzene
8260C	5035	Solid	1,3,5-Trimethylbenzene
8260C	5035	Solid	1,3-Dichlorobenzene
8260C	5035	Solid	1,3-Dichloropropane
8260C	5035	Solid	1,3-Dichloropropene, Total
8260C	5035	Solid	1,4-Dichlorobenzene
8260C	5035	Solid	1,4-Dioxane
8260C	5035	Solid	2,2-Dichloropropane
8260C	5035	Solid	2-Butanone (MEK)

Accreditation/Certification Summary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Laboratory: Eurofins New England (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8260C	5035	Solid	2-Chlorotoluene
8260C	5035	Solid	2-Hexanone (MBK)
8260C	5035	Solid	4-Chlorotoluene
8260C	5035	Solid	4-Isopropyltoluene
8260C	5035	Solid	4-Methyl-2-pentanone (MIBK)
8260C	5035	Solid	Acetone
8260C	5035	Solid	Acrylonitrile
8260C	5035	Solid	Benzene
8260C	5035	Solid	Bromobenzene
8260C	5035	Solid	Bromochloromethane
8260C	5035	Solid	Bromodichloromethane
8260C	5035	Solid	Bromoform
8260C	5035	Solid	Bromomethane
8260C	5035	Solid	Carbon disulfide
8260C	5035	Solid	Carbon tetrachloride
8260C	5035	Solid	Chlorobenzene
8260C	5035	Solid	Chloroethane
8260C	5035	Solid	Chloroform
8260C	5035	Solid	Chloromethane
8260C	5035	Solid	cis-1,2-Dichloroethene
8260C	5035	Solid	cis-1,3-Dichloropropene
8260C	5035	Solid	Dibromochloromethane
8260C	5035	Solid	Dibromomethane
8260C	5035	Solid	Dichlorodifluoromethane (Freon 12)
8260C	5035	Solid	di-Isopropyl ether
8260C	5035	Solid	Ethanol
8260C	5035	Solid	Ethyl ether
8260C	5035	Solid	Ethyl tert-butyl ether
8260C	5035	Solid	Ethylbenzene
8260C	5035	Solid	Hexachlorobutadiene
8260C	5035	Solid	Isopropylbenzene
8260C	5035	Solid	m,p-Xylene
8260C	5035	Solid	Methyl tert-butyl ether
8260C	5035	Solid	Methylene Chloride
8260C	5035	Solid	Naphthalene
8260C	5035	Solid	n-Butylbenzene
8260C	5035	Solid	N-Propylbenzene
8260C	5035	Solid	o-Xylene
8260C	5035	Solid	sec-Butylbenzene
8260C	5035	Solid	Styrene
8260C	5035	Solid	Tert-amyl methyl ether
8260C	5035	Solid	tert-Butanol
8260C	5035	Solid	tert-Butylbenzene
8260C	5035	Solid	Tetrachloroethene
8260C	5035	Solid	Tetrahydrofuran
8260C	5035	Solid	Toluene
8260C	5035	Solid	trans-1,2-Dichloroethene

Accreditation/Certification Summary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Laboratory: Eurofins New England (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8260C	5035	Solid	trans-1,3-Dichloropropene
8260C	5035	Solid	trans-1,4-Dichloro-2-butene
8260C	5035	Solid	Trichloroethene
8260C	5035	Solid	Trichlorofluoromethane (Freon 11)
8260C	5035	Solid	Vinyl chloride
8260C	5035	Solid	Xylenes, Total
8270D	3546	Solid	1,2,4,5-Tetrachlorobenzene
8270D	3546	Solid	1,2,4-Trichlorobenzene
8270D	3546	Solid	1,2-Dichlorobenzene
8270D	3546	Solid	1,3-Dichlorobenzene
8270D	3546	Solid	1,4-Dichlorobenzene
8270D	3546	Solid	2,4,5-Trichlorophenol
8270D	3546	Solid	2,4,6-Trichlorophenol
8270D	3546	Solid	2,4-Dichlorophenol
8270D	3546	Solid	2,4-Dimethylphenol
8270D	3546	Solid	2,4-Dinitrophenol
8270D	3546	Solid	2,4-Dinitrotoluene
8270D	3546	Solid	2,6-Dinitrotoluene
8270D	3546	Solid	2-Chloronaphthalene
8270D	3546	Solid	2-Chlorophenol
8270D	3546	Solid	2-Methylphenol
8270D	3546	Solid	2-Nitroaniline
8270D	3546	Solid	2-Nitrophenol
8270D	3546	Solid	3 & 4 Methylphenol
8270D	3546	Solid	3,3'-Dichlorobenzidine
8270D	3546	Solid	3-Nitroaniline
8270D	3546	Solid	4,6-Dinitro-2-methylphenol
8270D	3546	Solid	4-Bromophenyl phenyl ether
8270D	3546	Solid	4-Chloro-3-methylphenol
8270D	3546	Solid	4-Chloroaniline
8270D	3546	Solid	4-Chlorophenyl phenyl ether
8270D	3546	Solid	4-Nitroaniline
8270D	3546	Solid	4-Nitrophenol
8270D	3546	Solid	Acetophenone
8270D	3546	Solid	Aniline
8270D	3546	Solid	Azobenzene/Diphenyldiazene
8270D	3546	Solid	Benzidine
8270D	3546	Solid	Benzoic acid
8270D	3546	Solid	Benzyl alcohol
8270D	3546	Solid	bis (2-chloroisopropyl) ether
8270D	3546	Solid	Bis(2-chloroethoxy)methane
8270D	3546	Solid	Bis(2-chloroethyl)ether
8270D	3546	Solid	Bis(2-ethylhexyl) phthalate
8270D	3546	Solid	Butyl benzyl phthalate
8270D	3546	Solid	Carbazole
8270D	3546	Solid	Dibenzofuran
8270D	3546	Solid	Diethyl phthalate

Eurofins New England

Accreditation/Certification Summary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Laboratory: Eurofins New England (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8270D	3546	Solid	Dimethyl phthalate
8270D	3546	Solid	Di-n-butyl phthalate
8270D	3546	Solid	Di-n-octyl phthalate
8270D	3546	Solid	Hexachlorobenzene
8270D	3546	Solid	Hexachlorobutadiene
8270D	3546	Solid	Hexachlorocyclopentadiene
8270D	3546	Solid	Hexachloroethane
8270D	3546	Solid	Isophorone
8270D	3546	Solid	Nitrobenzene
8270D	3546	Solid	N-Nitrosodimethylamine
8270D	3546	Solid	N-Nitrosodi-n-propylamine
8270D	3546	Solid	N-Nitrosodiphenylamine
8270D	3546	Solid	Pentachloronitrobenzene
8270D	3546	Solid	Pentachlorophenol
8270D	3546	Solid	Phenol
8270D	3546	Solid	Pyridine
8270D_LL_PAH	3546	Solid	1-Methylnaphthalene
8270D_LL_PAH	3546	Solid	2-Methylnaphthalene
8270D_LL_PAH	3546	Solid	Acenaphthene
8270D_LL_PAH	3546	Solid	Acenaphthylene
8270D_LL_PAH	3546	Solid	Anthracene
8270D_LL_PAH	3546	Solid	Benzo[a]anthracene
8270D_LL_PAH	3546	Solid	Benzo[a]pyrene
8270D_LL_PAH	3546	Solid	Benzo[b]fluoranthene
8270D_LL_PAH	3546	Solid	Benzo[g,h,i]perylene
8270D_LL_PAH	3546	Solid	Benzo[k]fluoranthene
8270D_LL_PAH	3546	Solid	Bis(2-ethylhexyl) phthalate
8270D_LL_PAH	3546	Solid	Chrysene
8270D_LL_PAH	3546	Solid	Dibenz(a,h)anthracene
8270D_LL_PAH	3546	Solid	Fluoranthene
8270D_LL_PAH	3546	Solid	Fluorene
8270D_LL_PAH	3546	Solid	Indeno[1,2,3-cd]pyrene
8270D_LL_PAH	3546	Solid	Naphthalene
8270D_LL_PAH	3546	Solid	Phenanthrene
8270D_LL_PAH	3546	Solid	Pyrene
9045D		Solid	pH
9045D		Solid	Temperature
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids
SM 2510B		Solid	Specific Conductance

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-24
A2LA	ISO/IEC 17025	0001.01	11-30-24

Eurofins New England

Accreditation/Certification Summary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alabama	State	43200	01-31-25
Alaska	State	PA00009	06-30-24
Alaska (UST)	State	17-027	02-28-25
Arizona	State	AZ0780	03-12-25
Arkansas DEQ	State	88-00660	08-09-24
California	State	2792	11-30-24
Colorado	State	PA00009	06-30-24
Connecticut	State	PH-0746	06-30-25
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-25
Delaware (DW)	State	N/A	01-31-25
Florida	NELAP	E87997	06-30-25
Georgia (DW)	State	C048	01-31-25
Hawaii	State	N/A	01-31-25
Illinois	NELAP	200027	01-31-25
Iowa	State	361	03-01-24 *
Kansas	NELAP	E-10151	10-31-24
Kentucky (DW)	State	KY90088	12-31-24
Kentucky (UST)	State	0001.01	11-30-24
Kentucky (WW)	State	KY90088	12-31-23 *
Louisiana (All)	NELAP	02055	06-30-24
Maine	State	2019012	03-12-25
Maryland	State	100	06-30-24
Massachusetts	State	M-PA009	06-30-24
Michigan	State	9930	01-31-25
Minnesota	NELAP	042-999-487	12-31-24
Mississippi	State	023	01-31-25
Missouri	State	450	01-31-25
Montana (DW)	State	0098	01-01-25
Nebraska	State	NE-OS-32-17	01-31-25
New Hampshire	NELAP	2730	01-10-25
New Jersey	NELAP	PA011	06-30-24
New York	NELAP	10670	03-31-24
North Carolina (DW)	State	42705	07-31-24
North Carolina (WW/SW)	State	521	12-31-24
Oklahoma	NELAP	9804	08-31-24
Oregon	NELAP	PA200001	09-11-24
Pennsylvania	NELAP	36-00037	01-28-25
Quebec Ministry of Environment and Fight against Climate Change	PALA	507	09-16-24
Rhode Island	State	LAO00338	12-30-24
South Carolina	State	89002	01-31-24 *
Tennessee	State	02838	01-31-25
Texas	NELAP	T104704194-23-46	08-31-24
USDA	US Federal Programs	525-22-298-19481	10-25-25
Vermont	State	VT - 36037	10-28-24
Virginia	NELAP	460182	06-14-25
Washington	State	C457	04-11-24
West Virginia (DW)	State	9906 C	01-31-25
West Virginia DEP	State	055	07-31-24
Wyoming	State	8TMS-L	01-31-25

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins New England

Accreditation/Certification Summary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Wyoming (UST)	A2LA	0001.01	11-30-24

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
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- 14
- 15
- 16

Method Summary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds (GC/MS)	MA DEP	EET NE
8270D	Semivolatile Organic Compounds (GC/MS)	MA DEP	EET NE
8270D_LL_PAH	Semivolatile Organic Compounds (GC/MS) Low level PAH	SW846	EET NE
8082	Polychlorinated Biphenyls (GC/ECD)	MA DEP	EET NE
8100	Polynuclear Aromatic Hydrocarbons (PAHs) (GC)	SW846	EET NE
6010D	Metals (ICP)	SW846	EET NE
7471A	Mercury (CVAA)	SW846	EET NE
1010A	Ignitability, Pensky-Martens Closed-Cup Method	SW846	ELLE
9012	Cyanide, Reactive	SW846	ELLE
9034	Sulfide, Reactive	SW846	ELLE
9045D	pH	SW846	EET NE
9060	Organic Carbon, Total (TOC)	SW846	ELLE
Moisture	Percent Moisture	EPA	EET NE
SM 2510B	Conductivity, Specific Conductance	SM	EET NE
1311	TCLP Extraction	SW846	EET NE
3010A	Preparation, Total Metals	SW846	EET NE
3050B	Preparation, Metals	SW846	EET NE
3540C	Soxhlet Extraction	SW846	EET NE
3546	Microwave Extraction	SW846	EET NE
5035	Closed System Purge and Trap	SW846	EET NE
7.3.3	Cyanide, Reactive	SW846	ELLE
7.3.4	Sulfide, Reactive	SW846	ELLE
7471B	Preparation, Mercury	SW846	EET NE
DI Leach	Deionized Water Leaching Procedure	ASTM	EET NE
Frozen Preserve	Freezing Samples	None	EET NE

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

MA DEP = Massachusetts Department Of Environmental Protection

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET NE = Eurofins New England, 646 Camp Ave, North Kingstown, RI 02852, TEL (413)789-9018

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
620-17450-1	ATC-3 (0-5)	Solid	03/15/24 09:10	03/18/24 15:25
620-17450-2	ATC-3 (5-10)	Solid	03/15/24 09:30	03/18/24 15:25
620-17450-3	ATC-2 (0-5)	Solid	03/15/24 10:15	03/18/24 15:25
620-17450-4	ATC-2 (5-10)	Solid	03/15/24 11:00	03/18/24 15:25
620-17450-5	ATC-1 (0-5)	Solid	03/15/24 11:20	03/18/24 15:25
620-17450-6	ATC-1 (5-10)	Solid	03/15/24 11:30	03/18/24 15:25
620-17450-7	Comp (0-5)	Solid	03/15/24 12:00	03/18/24 15:25
620-17450-8	Comp (5-10)	Solid	03/15/24 12:15	03/18/24 15:25
620-17450-9	ATC-8 (0-5)	Solid	03/14/24 10:00	03/18/24 15:25
620-17450-10	ATC-8 (5-10)	Solid	03/14/24 11:50	03/18/24 15:25
620-17450-11	ATC-7 (0-5)	Solid	03/14/24 11:10	03/18/24 15:25
620-17450-12	ATC-7 (5-10)	Solid	03/14/24 12:10	03/18/24 15:25
620-17450-13	ATC-6 (0-5)	Solid	03/14/24 12:30	03/18/24 15:25
620-17450-14	ATC-6 (5-10)	Solid	03/14/24 12:45	03/18/24 15:25
620-17450-15	ATC-4 (0-5)	Solid	03/14/24 13:40	03/18/24 15:25
620-17450-16	ATC-4 (5-10)	Solid	03/14/24 13:55	03/18/24 15:25
620-17450-17	ATC-5 (0-5)	Solid	03/14/24 14:25	03/18/24 15:25
620-17450-18	ATC-5 (5-10)	Solid	03/14/24 12:10	03/18/24 15:25



620-17450 Chain of Custody

alytical

CHAIN OF CUSTODY RECORD

Page 1 of 2

Special Handling:

- ☒ Standard TAT - 7 to 10 business days
☐ Rush TAT - Date Needed _____

All TATs subject to laboratory approval
Min 24-hr notification needed for rushes
Samples disposed after 30 days unless otherwise instructed.

Report To Atlas Technical Consultants LLC
10 State Street, Suite 100
Woburn, MA 01801

Telephone # 781-404-1431
Project Mgr Stephan Landry

Invoice To Atlas

P O No _____ Quote # _____

Project No 6000007464

Site Name Tufts Street Improvement

Location Tufts St., Somerville MA
Sampler(s) Eric Marchese

State MA

F=Field Filtered 1=Na₂SO₄ 2=HCl 3=H₂SO₄ 4=HNO₃ 5=NaOH 6=Ascorbic Acid
7=CH₃OH 8=NaHSO₄ 9=Deionized Water 10=H₃PO₄ 11= iced 12=

DW=Drinking Water GW=Groundwater SW=Surface Water WW=Waste Water
O=Oil SO=Soil SL=Sludge A=Indoor/Ambient Air SG=Soil Gas

X1= _____ X2= _____ X3= _____

List Preservative Code below:

QA/QC Reporting Notes:
* additional charges may apply

Containers

Analysis

Check if chlorinated

MA DEP MCP CAM Report? ☐ Yes ☐ No
CT DPH RCP Report? ☐ Yes ☐ No
☒ Standard ☐ No QC
☐ ASP A* ☐ ASP B*
☐ INJ Reduced* ☐ INJ Full*
☐ Tier II* ☐ Tier IV*
☐ Other MassDEPS-1
State-specific reporting standards

Lab ID:	Sample ID:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	8260 Low Level
-1	ATC-3 (0-5)	3/15/24	0910	✓	SP	3	1	1	1	X
-2	ATC-3 (5-10)		0930	✓		1	1	1	1	
-3	ATC-2 (0-5)		1015	✓		1	1	1	1	
-4	ATC-2 (5-10)		1100	✓		1	1	1	1	
-5	ATC-1 (0-5)		1120	✓		1	1	1	1	
-6	ATC-1 (5-10)		1130	✓		1	1	1	1	
-7	COMP (0-5)		1200	✓	C SO	4	4	4	4	X
-8	COMP (5-10)		1215	✓	C SO	4	4	4	4	X

Relinquished by:

Received by:

Temp °C

EDD format:

E-mail to

Gez A. Wozniak

ATC-5 Fridge

Observed

Stephan.Landry@oneatlas.com

Stephan.Landry@oneatlas.com

Ken B...

3/18/24

Corrected

3/14/24

3/14/24

3/18/24

18568

IR ID#

6

Condition upon receipt:

Custody Seals: ☐ Present ☐ Intact ☐ Broken

☐ Ambient ☐ Iced ☒ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen



Spectrum Analytical

CHAIN OF CUSTODY RECORD

Special Handling:
☒ Standard TAT - 7 to 10 business days
☐ Rush TAT - Date Needed _____
All TATs subject to laboratory approval
Min 24-hr notification needed for rushes
Samples disposed after 30 days unless otherwise instructed.

Page 2 of 2

Report To Atlas Technical Consultants LLC
10 State Street, Suite 100
Woburn, MA 01801

Telephone # 781-404-1431
Project Mgr Stephan Landry

Invoice To Atlas
P O No _____ Quote # _____
11= iced 12=

Project No 6000007464
Site Name Tufts Street Improvement
Location Tufts St, Somerville MA State MA
Sampler(s) Eric Marchese

F=Field Filtered 1=Na₂S₂O₃ 2=HCl 3=H₂SO₄ 4=HNO₃ 5=NaOH 6=Ascorbic Acid
7=CH₃OH 8=NaHSO₄ 9=Deionized Water 10=H₃PO₄ 11= iced 12=

DW=Drinking Water GW=Groundwater SW=Surface Water WW=Waste Water
O=Oil SO=Soil SL=Sludge A=Indoor/Ambient Air SG=Soil Gas
X1= X2= X3=

Lab ID:	Sample ID:	Date:	Time:	Type	Containers				List Preservative Code below:				Check if chlorinated	QA/QC Reporting Notes: * additional charges may apply	
					# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	7,9						
-9	ATC-9 (0-5)	3/14/24	1000	G SG	3			1					X		
-10	ATC-8 (5-10)		1150		1			1							
-11	ATC-7 (0-5)		1110		1			1							
-12	ATC-7 (5-10)		1310		1			1							
-13	ATC-6 (0-5)		1230		1			1							
-14	ATC-6 (5-10)		1245		1			1							
-15	ATC-64 (0-5)		1340		1			1							
-16	ATC-4 (5-10)		1355		1			1							
-17	ATC-5 (0-5)		1425		1			1							
-18	ATC-5 (5-10)		1510		1			1							

Relinquished by: Eric Marchese Received by: Atlas Fringe
Date: 3/15/24 Time: 1500 Temp °C Observed: 4.2
Date: 3/18/24 Time: 1240 Temp °C Observed: 4.2
Date: 3/18/24 Time: 1825 Temp °C Observed: 4.4
E-mail to: Stephan.Landry@oneatlas.com E-mail to: Stephan.Landry@oneatlas.com

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☐ Ambient ☐ Iced ☒ Refrigerated ☒ DI VOA Frozen ☐ Soil Jar Frozen

Environment Testing

mb

Login Sample Receipt Checklist

Client: Atlas Technical Consultants LLC

Job Number: 620-17450-1

Login Number: 17450

List Source: Eurofins New England

List Number: 1

Creator: Scott, Krishnan F

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Atlas Technical Consultants LLC

Job Number: 620-17450-1

Login Number: 17450

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

List Number: 2

List Creation: 03/19/24 12:15 PM

Creator: Ballard, Megan

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable, where thermal pres is required ($\leq 6^{\circ}\text{C}$, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temp acceptable, where thermal pres is required ($\leq 6^{\circ}\text{C}$, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace $> 6\text{mm}$ in diameter (none, if from WV)?	N/A	



Massachusetts Department of Environmental Protection

eDEP Transaction Copy

Here is the file you requested for your records.

To retain a copy of this file you must save and/or print.

Username: **MGITTEN**

Transaction ID: **1896047**

Document: **BWSC126 Miscellaneous Document Transmittal Form**

Size of File: **161.13K**

Status of Transaction: **In Process**

Date and Time Created: **5/14/2025:1:54:06 PM**

Note: This file only includes forms that were part of your transaction as of the date and time indicated above. If you need a more current copy of your transaction, return to eDEP and select to "Download a Copy" from the Current Submittals page.

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Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

Miscellaneous Document Transmittal Form

BWSC 126

Release Tracking Number

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Bureau of Waste Site Cleanup

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Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

Miscellaneous Document Transmittal Form

BWSC 126

Release Tracking Number

3 - 51811

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10 State Street, Suite 100
Woburn, MA 01801
781-932.9400 | oneatlas.com

May 16, 2025

Ms. Rebecca Wright, P.E.
Senior Project Manager of Streetscapes
Engineering Department
CITY OF SOMERVILLE
1 Franey Road
Somerville, Massachusetts 02145

via email: rwright@somervillema.gov

**Subject: Utility-Related Abatement Measure Notification Report
Tufts Street Improvements Project
Tufts Street
Somerville, MA
RTN 3-51811
Atlas Project No. 600007464**

Dear Ms. Wright:

On behalf of the City of Somerville, Atlas Technical Consultants LLC (Atlas) has prepared this Utility-Release Abatement Measure (URAM) Notification letter to provide the material facts, data, and related information for the upcoming Tufts Street Improvements Project to meet the requirements of the Massachusetts Contingency Plan (MCP) at 310 CMR 40.0460. The URAM will support subsurface work taking place within the MCP Disposal Site boundary associated with Release Tracking Number (RTN) 3-23246. The project limits are shown on attached **Drawing 1** from the project's Contract Documents.

Atlas orally notified the Massachusetts Department of Environmental Protection (MassDEP) at approximately 1:30 PM on May 9, 2025, of the plan to manage soil and groundwater within the Disposal Site for RTN 3-23246 as a URAM for the City of Somerville. The MassDEP assigned RTN 3-51811 for URAM activities.

PROJECT BACKGROUND

The City of Somerville Tufts Street Improvement Project is to implement traffic calming and accessibility improvements that will reconstruct sidewalks, install new raised stormwater inlets drains and other stormwater system enhancements to improve the current stormwater management system, and repave Tufts Street between Cross Street and Washington Street as part of the City's Pavement and Sidewalk Management Program. Most excavations will be limited to 3 feet below grade with some excavations for stormwater management components extending to 5 feet below grade. Groundwater has been observed to range from approximately 7 to 13 feet below grade in the majority of the area where excavation will occur. To the extent practicable, soil will be reused in the area from which it is excavated. If groundwater needs to be managed, it will be recharged to the work area it came from. The limit of work is shown on attached **Figures 1 and 2**.

Based upon the volume of soil to be managed during the URAM, the City of Somerville has engaged Atlas to provide MCP compliance and associated Licensed Site Professional Services for this project. Michael Gitten, LSP, PE is the LSP of record for the URAM.

Most work is located within the Disposal Site listed by the MassDEP under RTN 3-23246. **Figure 1** shows the northern extent of the Disposal Site as it relates to limits of work and all the proposed work shown on **Figure 2** is within the Disposal Site. This Disposal Site is associated with a release of tetrachloroethylene, also known as perchloroethylene (PCE), to soil and groundwater from a former chemical warehouse located at the abutting 50 Tufts Street property. Based upon a review of reports submitted to the MassDEP for RTN 3-23246 Atlas concludes that the vertical extent of this Disposal Site begins just below the pavement surface and extends to at least 10 feet below grade.

It is anticipated that approximately 960 cubic yards of soil will be excavated from within the Disposal Site boundary associated with RTN 3-23246. Approximately 540 cubic yards will be returned to the location where it was excavated, and the remainder will be managed as Remediation Waste in accordance with the MCP. If groundwater is encountered and needs to be removed to facilitate stormwater system improvements, it will be recharged to the immediate subsurface location from where it is extracted in a manner that will ensure it remains within the Disposal Site boundary. Additional details on how soil and groundwater will be managed are presented below.

SITE INVESTIGATION

The Disposal Site associated with RTN 3-23246 has been investigated for more than 20 years. To supplement subsurface information from these investigations, on March 14 and 15, 2024, Atlas supervised the installation of 8 soil borings identified as ATC-1 to ATC-8 for sampling and laboratory analyses of soil to conduct in-situ pre-characterization of soil within the Tufts Street right-of-way. Locations were selected to reflect areas where soil excavation was proposed to support planned work. All detected volatile organic compounds (VOC) were below their MCP Method 1 Standards as were the detection limits for those compounds not detected. The attached Environmental Site Conditions Summary, Tufts Street Improvements Project (Atlas, May 2024) report provides additional information related to this investigation as well as a review of groundwater data generated by others from this area. Groundwater is impacted with PCE, trichloroethylene (TCE), and cis 1,2-dichloroethylene above their MCP Method 1 GW-2 standards. No exceedances of Method 1 GW-3 standards were reported.

URAM

The management of soil and groundwater within the RTN 3-23246 Disposal Site as a URAM have been incorporated into the Contract Document Specifications for 2025 Street Improvements and Additional Work Locations ("Specifications"). Relevant Specifications are attached. The following summarizes the Specification requirements and associated Item number:

In summary they require:

Scope of Work: Identifies that work within the limits of the Disposal Site for RTN 3-23246 will be subject to URAM. The Environmental Site Conditions Summary, Tufts Street Improvements Project is incorporated into the Contract Documents.

Trench Dams For Drainage Pipe, Item 158.1: Requires that bentonite Check Dams be installed a minimum of once per drainage pipe section greater than 30 feet in length to mitigate the potential for the drain pipe system to provide a preferential pathway for groundwater contamination migration.

Note that all storm drain pipe and structure connections are required to be water-tight to prevent the infiltration of groundwater.

Environmental Health and Safety Program, Item 180.01: Establish requirements for a Environmental Health and Safety Plan stamped by a Certified Industrial Hygienist and

the document incorporate the requirements of OSHA Standard 29 CFR 1910.120(b) (“HAZWOPER”) and the MCP at 310 CMR 40.0018.

Personal Protection Level C Upgrade, Item 180.02: Requires that contractor be prepared to upgrade from HAZWOPER Level D personal protection equipment (PPE) to Level C.

Disposal of Soil, Items 181.12, 181.13, and 181.14: Identifies that soil will be managed as a URAM and establishes the requirements for:

- Storing soil within the work area and at the 50 Tufts Street property,
- Performing additional soil assessment activities if required,
- Off-site soil management and associated shipping papers,
- Tracking of soil managed off-site,
- Equipment decontamination,
- Submittals to be made for review the City’s LSP that include:
 - Proposed off-site soil disposal locations;
 - Procedures soil stockpiling, transport and disposal

Management of Groundwater, Item 183.1: Identifies options and requirements for managing groundwater if encountered during construction. These options are to either:

1. Recharging groundwater to the subsurface within 25 feet of the location from which it is extracted, ensuring it does not impact local groundwater flow or leave the Disposal Site or
2. Discharges to the municipal storm drain system in compliance with MassDEP and EPA regulations including the Federal National Pollutant Discharge Elimination System (NPDES) program and associated Dewatering and Remediation General Permit (DRGP) effective August 2, 2022).

Based upon the limited amount of dewatering anticipated and information from the selected contractor, it is currently anticipated that groundwater management will occur as outlined by the first option above.

To support off-site soil managed, a Contained-On-Determination (CID) submitted May 2025, to the MassDEP to re-classify soil to be disposed off-site that is a listed hazardous waste as non-hazardous waste. The CID presents Atlas’ review of relevant soil data submitted for RTN 3-23246 that was incorporated into the URAM soil management approach. The CID is attached.

The BWSC-119 URAM Transmittal Form is submitted concurrently with this letter. A validated unsigned draft of the BWSC-119 is attached.

LIMITATIONS

The substance, content, and findings of documents and/or other deliverables made to the City of Somerville (Client) including but not limited to reports, data, memorandums, and facsimiles, are for the sole use of the Client. No reliance for the data or findings contained in these deliverables may be extended to any third party without the express written consent of Atlas. Any unauthorized use or distribution of Atlas’ work shall be at the Client’s and recipient’s sole risk and without liability to Atlas.

This report presents conditions observed and encountered at the Site on the days of Atlas’ Site work only. The information presented in this report is based on our observations in the field at the time of our Site visit; a review of reasonably ascertainable documents and data; interviews with certain designated personnel; and a review of available agency files, as referenced herein. Data was collected at a limited number of locations on the Site. Analysis was limited to those samples collected and those parameters specifically analyzed for and noted in this report. It should be noted that conditions in other portions of the property not sampled by Atlas may differ

from those that were sampled. Conclusions, recommendations, and/or opinions in this report are based on information obtained from these installations, laboratory testing results, and applicable state regulations. Any qualitative or quantitative information regarding the Site, which was not available to Atlas at the time of this assessment, may result in a modification of the representations made in this report.

If you have questions or require further information regarding the information presented in this letter, please contact Michael Gitten.

Respectfully submitted,

ATLAS



Michael Gitten, LSP, PE
Area Manager
for Atlas
Direct Line: (781) 404 1439
Email: michael.gitten@oneatlas.com



Aaron G. Lucci
Project Manager
for Atlas
Direct Line: (781) 404 1351
Email: aaron.lucci@oneatlas.com

Attachments: Drawing 1
Figure 1
Figure 2
Environmental Site Conditions Summary Tufts Street Improvements Project
(Atlas, May 2024)
Specifications for 2025 Street Improvements and Additional Work Locations
(portion)
Contained In Determination (Atlas, May 2025)
Draft BWSC-119

Cc:

File: tufts st uram lsp opinion-rtn 3.51811.draft

A horizontal timeline with tick marks labeled 1, 2, 3, 4, 5, 6, and 7.

A horizontal timeline with tick marks labeled 1, 2, 3, 4, 5, 6, and 7.

A horizontal timeline with tick marks labeled 1, 2, 3, 4, 5, 6, and 7.

A horizontal timeline with tick marks labeled 1, 2, 3, 4, 5, 6, and 7.



A horizontal timeline with tick marks labeled 1, 2, 3, 4, 5, 6, and 7.



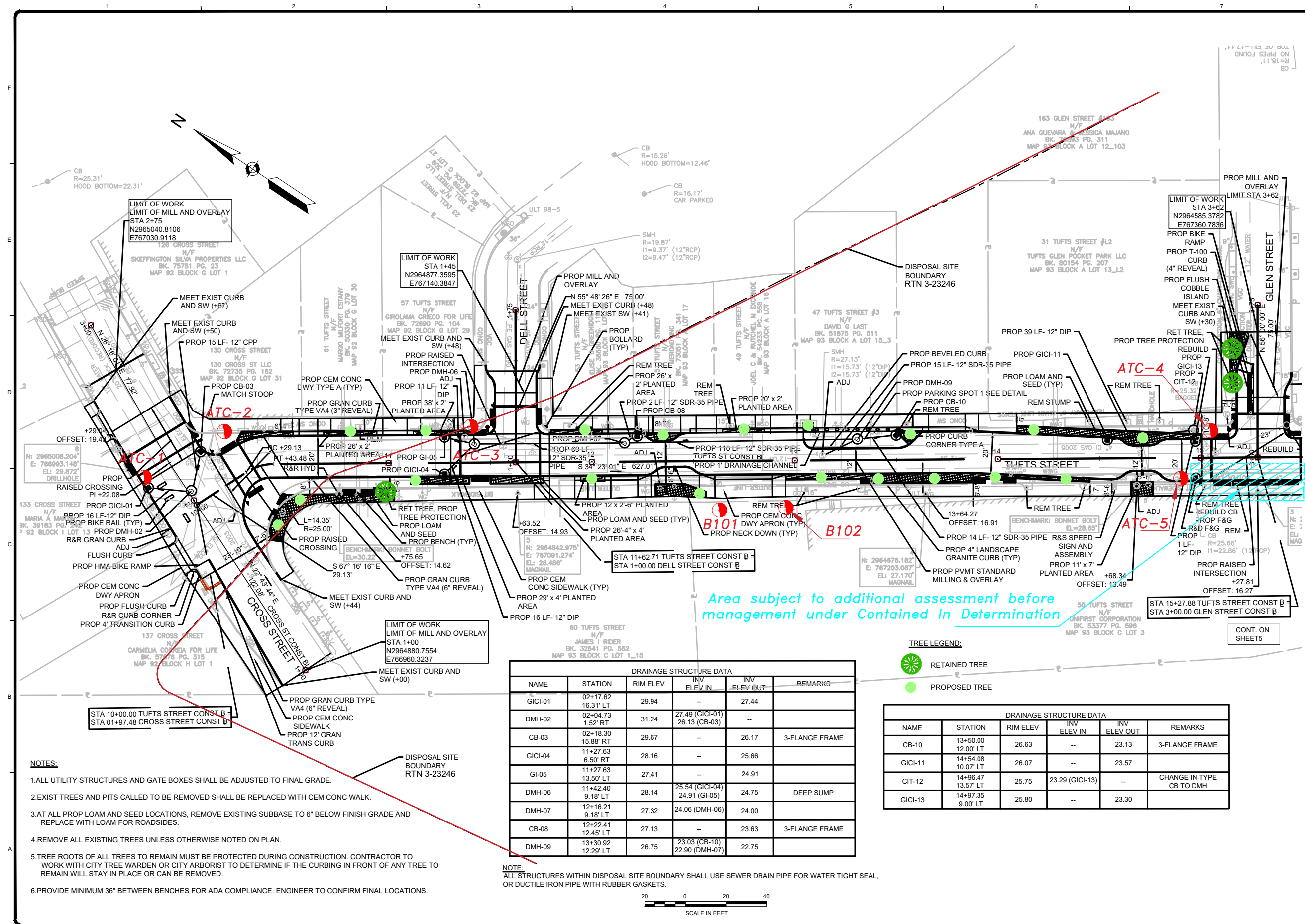
A horizontal timeline with tick marks labeled 1, 2, 3, 4, 5, 6, and 7.

A horizontal timeline with tick marks labeled 1, 2, 3, 4, 5, 6, and 7.

A horizontal timeline with tick marks labeled 1, 2, 3, 4, 5, 6, and 7.

\\CORP.ATC\INT\ATC_FILES\SERVER\WOB_FILES\SERVER\VIRO\CLIENTS - PROJECTS\N - S\SOMERVILLE\TUFTS STREET\FIGURES & PLANS\CAD\DRAWING1.DWG, FIG 2 - PAGE 4

12/16/2024 10:21:37 AM - P:\314177\23002\AD\SHSHEET\TUFTS STREET\FIGURES & PLANS\CAD\DRAWING1.DWG - JAKUBA\JTS, JESSE

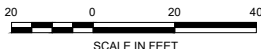


NOTES:

1. ALL UTILITY STRUCTURES AND GATE BOXES SHALL BE ADJUSTED TO FINAL GRADE.
2. EXIST TREES AND PITS CALLED TO BE REMOVED SHALL BE REPLACED WITH CEM CONC WALK.
3. AT ALL PROP LOAM AND SEED LOCATIONS, REMOVE EXISTING SUBBASE TO 6" BELOW FINISH GRADE AND REPLACE WITH LOAM FOR ROADSIDES.
4. REMOVE ALL EXISTING TREES UNLESS OTHERWISE NOTED ON PLAN.
5. TREE ROOTS OF ALL TREES TO REMAIN MUST BE PROTECTED DURING CONSTRUCTION. CONTRACTOR TO WORK WITH CITY TREE WARDEN OR CITY ARBORIST TO DETERMINE IF THE CURBING IN FRONT OF ANY TREE TO REMAIN WILL STAY IN PLACE OR CAN BE REMOVED.
6. PROVIDE MINIMUM 36" BETWEEN BENCHES FOR ADA COMPLIANCE. ENGINEER TO CONFIRM FINAL LOCATIONS.

DRAINAGE STRUCTURE DATA					
NAME	STATION	RIM ELEV	INV ELEV IN	INV ELEV OUT	REMARKS
GICI-01	02+17.62 16.31' LT	29.94	--	27.44	
DMH-02	02+04.73 1.52' RT	31.24	27.49 (GICI-01) 26.13 (CB-03)	--	
CB-03	02+18.30 15.88' RT	29.67	--	26.17	3-FLANGE FRAME
GICI-04	11+27.63 6.50' RT	28.16	--	25.66	
GI-05	11+27.63 13.50' LT	27.41	--	24.91	
DMH-06	11+42.40 9.18' LT	28.14	25.54 (GICI-04) 24.91 (GI-05)	24.75	DEEP SUMP
DMH-07	12+16.21 9.18' LT	27.32	24.06 (DMH-06)	24.00	
CB-08	12+22.41 12.45' LT	27.13	--	23.63	3-FLANGE FRAME
DMH-09	13+30.92 12.29' LT	26.75	23.03 (CB-10) 22.90 (DMH-07)	22.75	

NOTE:
ALL STRUCTURES WITHIN DISPOSAL SITE BOUNDARY SHALL USE SEWER DRAIN PIPE FOR WATER TIGHT SEAL, OR DUCTILE IRON PIPE WITH RUBBER GASKETS.



TREE LEGEND:

- RETAINED TREE
- PROPOSED TREE

DRAINAGE STRUCTURE DATA					
NAME	STATION	RIM ELEV	INV ELEV IN	INV ELEV OUT	REMARKS
CB-10	13+50.00 12.00' LT	26.63	--	23.13	3-FLANGE FRAME
GICI-11	14+54.08 10.07' LT	26.07	--	23.57	
CIT-12	14+98.47 13.57' LT	25.75	23.29 (GICI-13)	--	CHANGE IN TYPE CB TO DMH
GICI-13	14+97.35 9.00' LT	25.80	--	23.30	



www.tetratech.com
100 Nickerson Road
Marlborough, Massachusetts 01752
Phone: (508) 786-2200 Fax: (508) 786-2201



Contained In Determination Petition
Northwestern Project Extent
City of Somerville
Tufts Street Right of Way Improvements
Somerville, MA

Project Number:
6000007464

Date:
05/08/2025

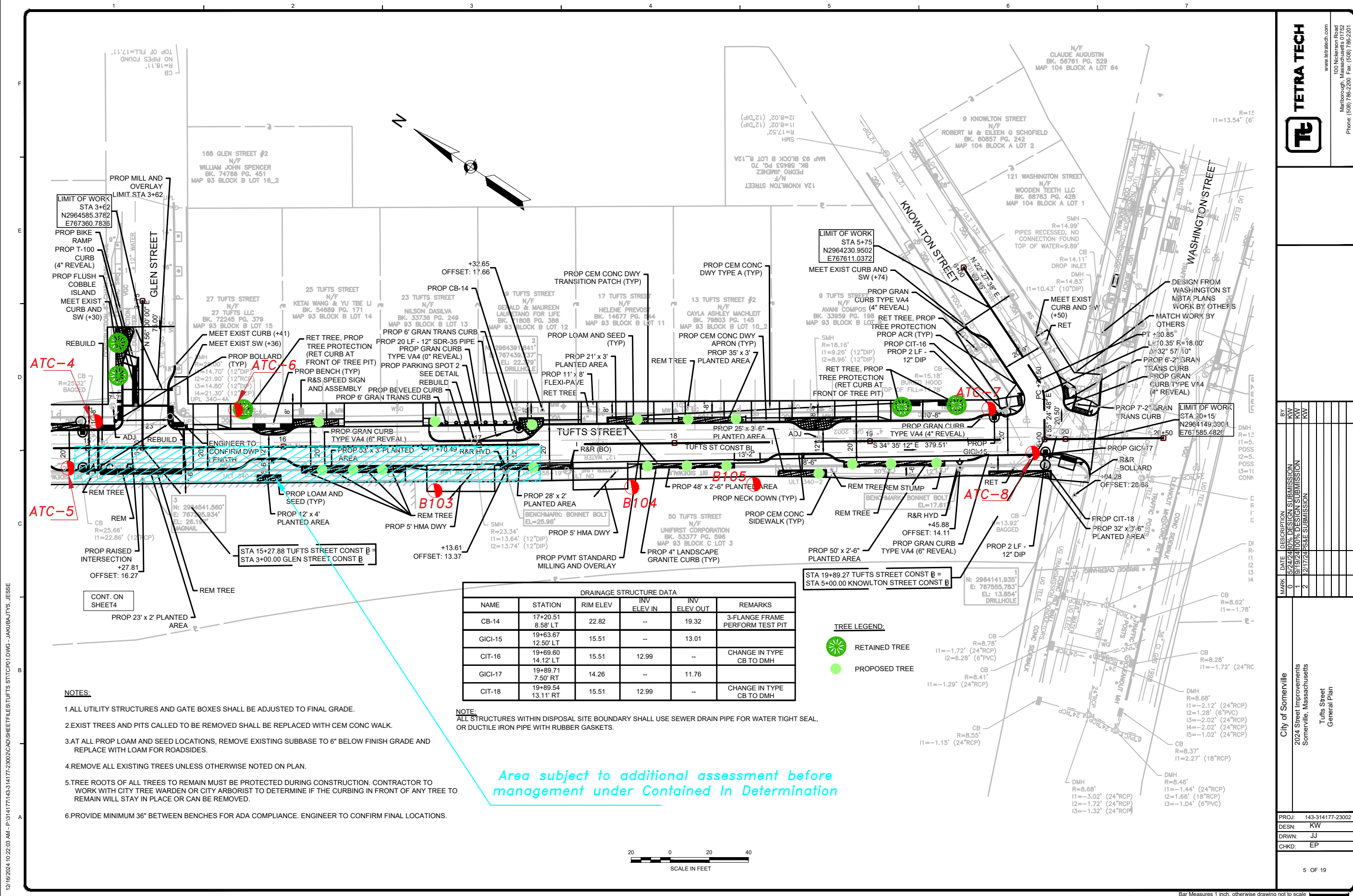
Drn. By:
AGL

Ckd. By:
MSG

Scale:
AS SHOWN

Figure:

1



100 Nickerson Road
Norborough, Massachusetts 01752
Phone: (508) 750-2200 Fax: (508) 750-2201

MARK	DATE	DESCRIPTION
0	5/24/2024	100% DESIGN SUBMISSION
1	9/19/2024	100% DESIGN SUBMISSION
2	2/17/2025	PS&E SUBMISSION

City of Somerville
2024 Street Improvements
Somerville, Massachusetts
Tufts Street
General Plan

PROJ: 143-314177-23002
DES: KW
DRWN: JJ
CHKD: EP

5 OF 19

Contained In Determination Petition Southeastern Project Extent

City of Somerville
Tufts Street Right of Way Improvements
Somerville, MA

Project Number:
6000007464

Date:
05/08/2025

Dm. By:
AGL

Ckd. By:
MSG

Scale:
AS SHOWN

Figure:



ENVIRONMENTAL SITE CONDITIONS SUMMARY TUFTS STREET IMPROVEMENTS PROJECT

**TUFTS STREET
SOMERVILLE, MA**

PREPARED FOR:

City of Somerville Engineering Department
Rebecca Wright, P.E.
Senior Project Manager of Streetscapes
1 Franey Road
Somerville, MA 02145

PREPARED BY:

Atlas Technical Consultants LLC
10 State Street, Suite 100
Woburn, Massachusetts 01801
Atlas Project No: 6000007464

May 10, 2024



10 State Street, Suite 100
Woburn, MA 01801
(781) 932-4200 | oneatlas.com

May 10, 2024

Ms. Rebecca Wright, P.E.
Senior Project Manager of Streetscapes
City of Somerville Engineering Department
1 Franey Road
Somerville, Massachusetts 02145

via email: rwright@somervillema.gov

**Subject: Environmental Site Conditions Summary
Tufts Street Improvements Project
Tufts Street
Somerville, MA
Atlas Project No. 6000007464**

Dear Ms. Wright:

Atlas Technical Consultants LLC (Atlas) is pleased to present this report to the City of Somerville (Client) in support of the Tufts Street Improvements Project. It presents the results of a soil investigation conducted in March 2024 at the Tufts Street right-of-way where a historical release of chlorinated volatile organic compounds (cVOCs) has occurred that is listed as a disposal site by the Massachusetts Department of Environmental Protection (MassDEP) under Release Tracking Number (RTN) 3-23246 in accordance with the Massachusetts Contingency Plan (MCP; 310 CMR 40.0000). This investigation was completed in accordance with Atlas Proposal 23-10605, Change Order 01 (February 1, 2024) and Change Order 02 (March 18, 2024).

If you have questions regarding this report, please contact Stephan Landry.

Respectfully submitted,

ATLAS

Michael Gitten, LSP, PE
Division Manager
Direct Line: 781-404-1439
Email: michael.gitten@oneatlas.com

Stephan H. Landry, LSP
Senior Project Manager
Direct Line: 781-404-1431
Email: stephan.landry@oneatlas.com

Attachment: MCP Site Conditions Summary Report

File: Environmental Site Conditions Summary - Tufts Street Improvements Project KF



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Appendix B	RTN 3-23246 Plans
Appendix C	GPRS Report
Appendix D	Boring Logs
Appendix E	Laboratory Analytical Report
Appendix F	RTN 3-23246 Groundwater Elevation and Data Tables
Appendix G	CID Petition



1. BACKGROUND

The City of Somerville Tufts Street Improvement Project is planning to reconstruct sidewalks and repave Tufts Street between Cross Street and Washington Street ("Site") as part of the City's Pavement and Sidewalk Management Program. As shown on the Tufts Street Construction Concept Plan (2/9/2024) included in Appendix A, the Site includes the intersections with Cross Street, Dell Street, Glen Street, Knowlton Street, and Washington Street. As part of this project, shallow soil and groundwater less than 10 feet below grade may be generated for onsite reuse or offsite disposal.

Based upon a review of documents submitted under the Massachusetts Contingency Plan (MCP, 310 CMR 40.0000) and available on the Massachusetts Department of Environmental Protection's (MassDEP) website, the majority of the Tufts Street right of way is located within a MCP defined disposal site listed by the (MassDEP) Bureau of Waste Site Cleanup (BWSC) under Release Tracking Number (RTN) 3-23246. The horizontal extent of the disposal site is shown on the Atlas annotated August 2023 GEI Phase V ROS Site Plan (GEI Consultants Inc. (GEI), August 2023) included in Appendix B. This disposal site is associated with a release of tetrachloroethylene, also known as perchloroethylene (PCE), and 1,1,1-trichloroethane (1,1,1-TCA) to soil and/or groundwater from a former drycleaner facility located at the southwesterly abutting 50 Tufts Street property. Additional chlorinated volatile organic compounds (cVOCs) resulting from degradation of PCE and 1,1,1-TCA, particularly in groundwater, are trichloroethylene (TCE), cis 1,2-dichloroethylene (cis 1,2-DCE), 1,1-dichloroethane (1,1-DCA), and 1,1-dichloroethene (1,1-DCE). The vertical extent of this disposal site begins just below the pavement surface and extends to at least 10 feet below grade.

As presented herein, Atlas completed a soil pre-characterization and groundwater assessment within the Tufts Street right-of-way to support management of soil and groundwater in accordance with the MCP during the proposed Tufts Street improvement project.

2. HEALTH & SAFETY

Prior to execution of field activities, Atlas prepared a Site-specific Health and Safety Plan (HASP) to address potential health and safety concerns associated with site activities. Atlas prepared a Traffic Management Plan and obtained Street Occupancy-Trench-Excavation Permit #ES24-000068 from the City of Somerville.



3. UTILITY CLEARANCE AND GEOPHYSICAL SURVEY

Atlas contacted the utility notification service Dig Safe® and the local authorities to locate and surficially mark known utilities in the vicinity of the proposed pre-marked soil boring locations. These locations generally coincided with where the proposed drainage structures are shown on the Tufts Street Construction Concept Plans.

Atlas contracted with the private utility locating service Ground Penetrating Radar Systems (GPRS) to conduct a geophysical survey of the area of the proposed drilling locations to identify the locations of buried structures or utilities on the Site. GPRS conducted the survey on March 8, 2024. The GPRS report with photos and suspected utility locations identifying the subsurface utilities located during the survey is included in Appendix C.

4. SOIL CONDITIONS - MARCH 2024 SOIL INVESTIGATION

On March 14 and 15, 2024, Atlas supervised the installation of eight (8) borings (ATC-1 to ATC-8) to a depth of 10 feet below ground surface (bgs) using a direct push probe (GeoProbe) drilling system for collection and analyses of soil samples. Samples were collected for laboratory analysis to pre-characterize soil for future potential off-site disposal or on-site reuse associated with the Tufts Street Improvements Project. The drilling was conducted by Geosearch of Sterling, Massachusetts. Geosearch pre-cleared each boring location with a VacMaster unit to a depth of 5-feet below ground surface (bgs).

As shown on the Atlas annotated Tufts Street Construction Conceptual Plan (Appendix A) and August 2023 Phase V ROS Site Plan in Appendix B and, borings ATC-4 to ATC-8 are located within the disposal site while boring ATC-3 is located at the approximate northeast edge of the disposal at the intersection with Dell Street. Borings ATC-1 and ATC-2 are located outside the disposal site at the intersection with Cross Street. At each boring location, discrete soil samples were collected by hand auger during preclearing from 0 to 5 feet below grade surface and in dedicated acetate liners using a Geoprobe drill rig from 5 to 10 feet below grade surface.

Two samples were collected under the supervision of Atlas personnel each boring for a total of sixteen (16) soil samples. Soil samples from each depth interval were split in the field and a portion was placed in a plastic bag, left to stabilize, and field-screened for total volatile organic compounds (TVOCs) using a photoionization detector (PID). The second portion of the soil sample was placed into laboratory provided glassware for laboratory analysis.

Atlas visually classified soils at each depth interval using the Modified Burmister Soil Classification Method as noted in the descriptions on boring logs provided in Appendix D. Soils were generally observed to consist of fine to medium or fine to coarse grained sand, with evidence of fill in some locations, between 0 to 6 feet below grade underlain by either a fine to medium/coarse sand or a silt or clay.



Wet soils near the apparent groundwater table were observed in soils between 5.5 to 8 feet bgs. As explained further in the groundwater conditions section below, the historical groundwater elevation measurements from groundwater monitoring wells located in Tufts Street have been generally between 8 to 13 feet below grade.

The sixteen samples were all collected in laboratory provided containers and submitted to Eurofins laboratory under a chain of custody for analyzed for low level volatile organic compounds (VOCs) by EPA Method 8260. As presented in Table 1 Tufts Street Borings Soil Analytical Summary Table, laboratory results ranged from non-detect for all VOCs at 15 of 16 samples. The only detected compound was TCE at 0.0314 milligrams per kilogram (mg/kg) at boring ATC-8, 5-10 feet below grade surface. This is concentration well below the MCP RCS-1 value of 1 mg/Kg. RCS-1 is applicable because the Site is within a residential neighborhood.

In additions to the above described discrete soil analyses of VOCs by 8260, two sets of composite soil samples, one set (ATC-1 to ATC-8 Composite 0-5') from the 0 to 5 foot below grade surface interval of the 8 borings and the other set (ATC-1 to ATC-8 Composite 5-10') from the 5 to 10 foot below grade surface interval of the 8 borings, were submitted in properly preserved laboratory provided containers to Eurofins laboratory for the following analyses typically required by soil management facilities for disposal or recycling: Semi-VOCs with low level PAHs (SIMS) by EPA Method 8270; PCBs by EPA Method 8082; RCRA 8 Metals; TCLP lead; Total Petroleum Hydrocarbons by 8100; Corrosivity; Total Organic Carbon; Flashpoint; Reactivity Cyanide and Sulfide; and Conductivity.

As summarized in the attached Tufts Street Borings Soil Analytical Summary table, the results of the soil analyses did not detect any analytes above their respective MCP RCS-1 reportable concentrations nor exhibit any characteristics of hazardous waste pursuant to 310 CMR 30.120. The only soil sample that contained a detectable concentration of a VOC was ATC-8, 5-10' where PCE at 0.0134 mg/Kg was reported. In addition, the laboratory method reporting limits for all the disposal site VOCs were below their respective RCS-1 reportable concentrations. The laboratory report is included in Appendix E.

The results of the VOC and other soil analytical parameters indicate that, pending the approval or 21-day presumptive approval from MassDEP of a Contained-In-Determination (CID) Petition, the soil from both within and outside the MCP Site portion of Tufts Street can be managed as a non-hazardous waste and would meet the acceptance criteria under MassDEP policy #Comm-97-001 for disposal as a regulated material to a Massachusetts Lined or Unlined Landfill. See Section 6.1 for additional information related to the CID Petition.



5. GROUNDWATER CONDITIONS

During the March 14-15, 2024, boring soil sampling activities wet soils were observed between 5.5 to 8 feet bgs. This is assumed to be near the top of the apparent groundwater table. Historical groundwater elevations from six groundwater monitoring wells located in Tufts Street, as shown on the Atlas annotated Monitoring Well Location plan from the August 2023 Phase V ROS in Appendix B, have been measured between 8 to 13 feet below grade. Table 9-1 from the August 2023 Phase V ROS(GEI) presented in Appendix F shows that the historical groundwater elevation measurements were as follows:

- MW-106 (11.38 to 12.19 feet below grade);
- MW-109 (10.41 to 12.15 feet below grade);
- MW-110 (1.1 to 2.8 feet below grade);
- GEO-4 (9.26 to 13.02 feet below grade);
- GEO-5 (7.55 to 12.79 feet below grade); and
- GEO-6 (7.39 to 12.75 feet below grade).

The depth to groundwater was very shallow (1.1 to 2.5 feet below grade) at well MW-110, which is located at the intersection with Knowlton Street near borings ATC-7 and ATC-8. This higher groundwater elevation may be due to a perched groundwater condition sometimes associated with clay soils. Coincidentally, clay soils were observed at approximately 6 feet below grade at borings ATC-7 and ATC-8.

The results of groundwater analyses for VOCs from the monitoring wells located in Tufts Street were from samples collected between 2004 and 2008, as summarized from the Table 4-2 from the August 2023 Phase V ROS included in Appendix F, VOCs detected in groundwater during this period from these wells ranged as follows:

GEO-4 (2004-2007)

- PCE: **24,000 to 8,200** ug/L
- TCE: **235 to 75** ug/L
- Cis 1,2-DCE: 16.7 to 5.5 ug/L
- 1,1,1-TCA: 113 to 70 ug/L
- 1,1-DCA: 7.1 to 2.7 ug/L
- 1,1-DCE: 6.1 to 17.8 ug/L

GEO-5 (2004-2007)

- PCE: **14,400** to 18 ug/L
- TCE: **446** to <1 ug/L
- Cis 1,2-DCE: **35** to <1 ug/L
- 1,1,1-TCA: 652 to <1 ug/L
- 1,1-DCA: 9.7 to 3.0 ug/L
- 1,1-DCE: 32.7 to 8.9 ug/L



GEO-6 (2004-2007)

- PCE: **1,980** to **487** ug/L
- TCE: **131** to **70** ug/L
- Cis 1,2-DCE: 15 to 6.3 ug/L
- 1,1,1-TCA: 77 to 26 ug/L
- 1,1-DCA: 4.4 to 0.92 ug/L
- 1,1-DCE: 11 to 2.8 ug/L

MW106 (2007-2008)

- PCE: 3 to 1 ug/L
- TCE: 4.9 to 1.2 ug/L
- Cis 1,2-DCE: **252** to 5 ug/L
- 1,1,1-TCA: 15 to 2 ug/L
- 1,1-DCA: <1.0 ug/L
- 1,1-DCE: 6.3 to 1.5 ug/L

MW109 (2007-2008)

- PCE: **178** to 17 ug/L
- TCE: 4.5 to 0.5 ug/L
- Cis 1,2-DCE: <1 ug/L
- 1,1,1-TCA: 1 to <1 ug/L
- 1,1-DCA: 1.2 to <1 ug/L
- 1,1-DCE: <1 ug/L

MW110 (2007)

- PCE: 0.93 ug/L to <1 ug/L
- TCE: <1 ug/L
- Cis 1,2-DCE: <1 ug/L
- 1,1,1-TCA: <1 ug/L
- 1,1-DCA: <1.0 ug/L
- 1,1-DCE: <1.0 ug/L

Groundwater concentrations that are greater than (>) the current MCP Method 1 GW-2 standards are bolded and underlined. There are no exceedances of Method 1 GW-3 standards.

Based on the concentrations of chlorinated VOCs detected in groundwater along as summarized here, groundwater that may need to be managed to accommodate installation of drainage structures may be either reinfiltrated adjacent to the approximate same area it is generated within the disposal site or transported off-site for disposal using a Uniform Hazardous Waste Manifest.



6. MCP COMPLIANCE

The following activities are required to comply with the MCP for that portion of the proposed work within the disposal site associated with RTN 3-23246.

6.1 Contained In Determination (CID) Petition

The only cVOC detected in soil from the March 14-15, 2024, sampling at Tufts Street was PCE at 0.0134 mg/Kg from boring ATC-8, 5'-10'. Since the total concentration of cVOCs is less than 1 parts per million or 1 mg/Kg, and other soil data indicates that there are no other hazardous waste characteristics associated with soils within Tufts Street, this soil may be classified as non-hazardous in Massachusetts with approval or 21-day presumptive approval of a Contained In Determination (CID) Petition from MassDEP. A CID petition provided in Appendix G will be submitted to MassDEP to classify up to 750 cubic yards of soil within disposal site area of Tufts Street as non-hazardous.

6.2 Utility-related Release Abatement Measure (URAM)

Management of soil and groundwater within the disposal site portion of the Tufts Street project, will need to be managed under a Utility-related Release Abatement Measure (URAM) in accordance with 310 CMR 40.0460 of the MCP. This disposal site to which the URAM applies is shown on plans in Appendix B. A Licensed Site Professional will be required since more than 20 cubic yards of soil impacted by a hazardous waste will be managed. URAM activities shall not be undertaken by a person performing construction activities until after that person has notified the MassDEP orally or in writing after which the URAM Plan will need to be submitted to MassDEP. MassDEP notification of the URAM activities will prompt MassDEP to issue a RTN specific to the Tufts Street URAM soil and groundwater management activities. The proposed URAM soil and groundwater management activities are to be presented in a URAM Plan per 310 CMR 40.0444, followed by site activity updates in a URAM Status Report per 40.0445 approximately 120-days after submittal of the URAM Plan and each 6-months thereafter until such time a URAM Completion Report per 40.0446 summarizing the results and completion of the soil and groundwater management activities has been submitted to MassDEP.

As noted above, MassDEP approval or 21-day presumptive of a CID Petition will be required to support the soil management portion of the URAM activities. The CID Petition will allow for onsite reuse and/or off-site disposal or recycling of Tufts Street soils as non-hazardous classified soils to an in-state or out-of-state landfill or recycling facility. Disposal or recycling of soil from *within the disposal site portion Tufts Street between Dell Street and Washington Street* may be transported off-site to an in-state or out-of-state licensed facility under a MassDEP Bill of Lading or non-hazardous uniform waste manifest. Disposal or recycling of soil from *outside the disposal site portion of Tufts Street between Dell Street and Cross Street* may be transported off-site to an in-state or out-of-state licensed facility under a MassDEP Bill of Lading (BOL), non-hazardous

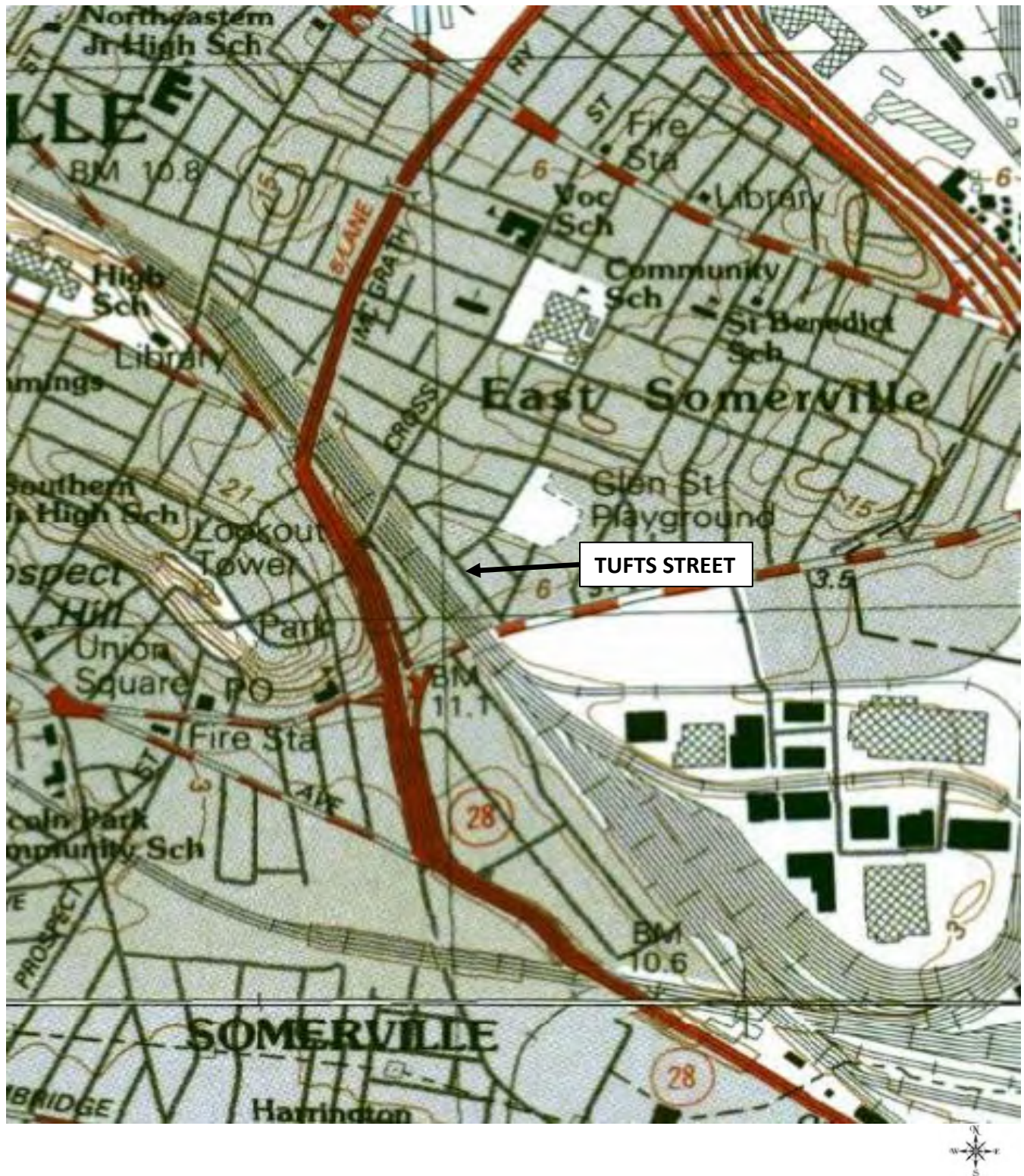


uniform waste manifest, or material shipping record (MSR). Soils within the disposal site portion Tufts Street may not be reused outside the disposal site but soils outside the disposal may be reused within the disposal site portion of Tufts Street.

If groundwater is encountered during installation of drainage structures and dewatering is required, the URAM Plan will need to provide for alternative methods to manage groundwater such as for example, onsite treatment and disposal, on-site re-infiltration, and/or offsite disposal as hazardous waste using a vacuum truck. Note that discharge of disposal site groundwater to the municipal sewer system, which is part of the Massachusetts Water Resources Authority (MWRA) district, is not allowed by the MWRA. Groundwater dewatering from within the disposal site that is to be re-infiltrated must stay within that disposal site area while groundwater dewatering from outside the disposal site may be re-infiltrated inside or outside the disposal site. The facility to which groundwater from the Tufts Street would be transported for disposal may require testing and documentation for acceptance.



FIGURES



10 State Street, Suite 100
Woburn, Massachusetts

PROJECT NO.: 6000007464

FIGURE 1

SITE LOCUS MAP
Tufts Street
Somerville, Massachusetts

MassDEP - Bureau of Waste Site Cleanup

Phase 1 Site Assessment Map: 500 feet & 0.5 Mile Radii

Site Information:

TUFTS STREET SOMERVILLE, MA

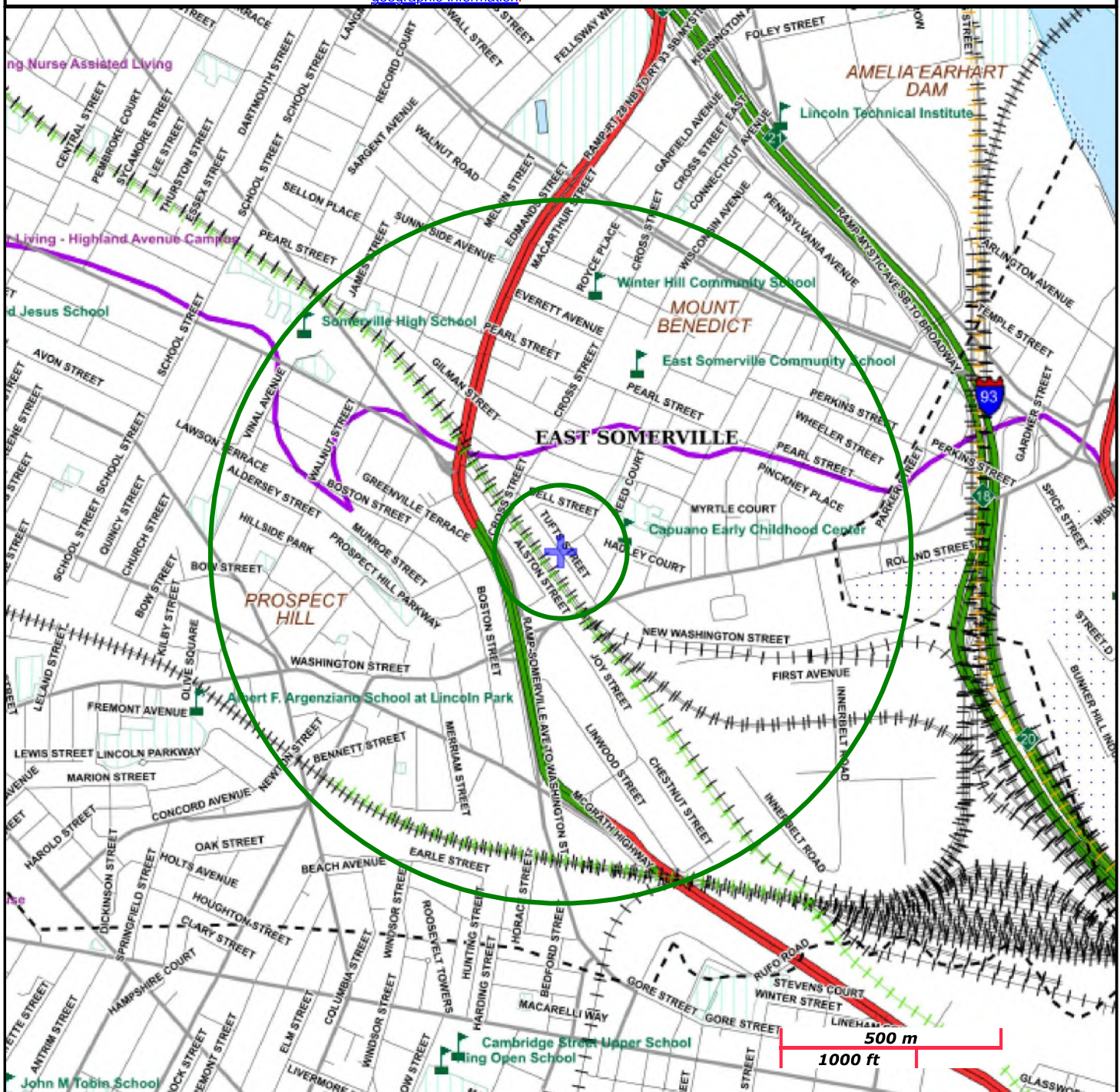
NAD83 UTM Meters:
4694316mN , 328064mE (Zone: 19)
May 6, 2024

The information shown is the best available at the date of printing. However, it may be incomplete. The responsible party and LSP are ultimately responsible for ascertaining the true conditions surrounding the site. Metadata for data layers shown on this map can be found at:
<https://www.mass.gov/orgs/massgis-bureau-of-geographic-information>



MassDEP

Commonwealth of Massachusetts
Department of Environmental Protection



Roads: Limited Access, Divided, Other Hwy, Major Road, Minor Road, Track, Trail

Boundaries: Town, County, DEP Region; Train; Powerline; Pipeline; Aqueduct

Basins: Major, PWS; Streams: Perennial, Intermittent, Man Made Shore, Dam

Aquifers: Medium Yield, High Yield, EPA Sole Source

Non Potential Drinking Water Source Area: Medium, High (Yield)

PWS Protection Areas: Zone II, IWPA, Zone A

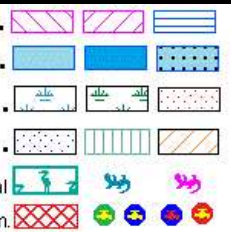
Hydrography: Open Water, PWS Reservoir, Tidal Flat

Wetlands: Freshwater, Saltwater, Cranberry Bog

FEMA 100yr Floodplain; Protected Open Space; ACEC

NHESP Pri-Hab of Rare Species; Vernal Pool: Cert., Potential

Solid Waste Landfill; PWS: Com. GW, SW, Emerg., Non-Com.





TABLE

Table 1 - Tufts Street Borings Soil Analytical Summary Table
With Comparison to MassDEP RCS-1 Reportable Concentrations and Soil Disposal Criteria per Massachusetts Landfill Policy #Comm-97-001
Tufts Street, Somerville, MA

Boring ID	ATC-1		ATC-2		ATC-3		ATC-4		ATC-5		ATC-6		ATC-7		ATC-8		ATC-1 to ATC-8 Composite	ATC-1 to ATC-8 Composite	MCP Reportable Concentration RCS-1	MassDEP COMM-97-001 Disposal Criteria	
Sample Depth (feet)	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10		MA Lined Landfill	MA Unlined Landfill
Sample Collection Date	3/15/24		3/15/24		3/15/24		3/14/24		3/14/24		3/14/24		3/14/24		3/14/24		3/15/24	3/15/24			
Analytical Parameter																					
Headspace PID Reading (ppmv)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
Volatile Organic Compounds (VOCs) by EPA Method 8260C (ug/Kg)																					
1,1,1,2-Tetrachloroethane	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	100	Total VOCs less than 10,000 ug/Kg	Total VOCs less than 4,000 ug/Kg
1,1,1-Trichloroethane	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	30,000		
1,1,2,2-Tetrachloroethane	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	5		
1,1,2-Trichloroethane	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	100		
1,1,2-Trichlorotrifluoroethane (Freon 113)	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	NSE		
1,1-Dichloroethane	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	400		
1,1-Dichloroethene	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	3,000		
1,1-Dichloropropene	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	NSE		
1,2,3-Trichlorobenzene	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	NSE		
1,2,3-Trichloropropane	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	100,000		
1,2,4-Trichlorobenzene	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	2,000		
1,2,4-Trimethylbenzene	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	1,000,000		
1,2-Dibromo-3-Chloropropane	< 9.38	< 10.6	< 10.9	< 12.8	< 19.7	< 10.3	< 10.1	< 10.5	< 9.85	< 8.87	< 10.4	< 11.5	< 9.34	< 25.3	< 12.4	< 9.88	na	na	5		
1,2-Dibromoethane (EDB)	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	100		
1,2-Dichlorobenzene	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	9,000		
1,2-Dichloroethane	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	100		
1,2-Dichloropropane	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	100		
1,3,5-Trichlorobenzene	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	NSE		
1,3,5-Trimethylbenzene	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	10,000		
1,3-Dichlorobenzene	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	3,000		
1,3-Dichloropropane	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	500		
1,3-Dichloropropene, Total	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	10		
1,4-Dichlorobenzene	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	700		
1,4-Dioxane	< 93.8	< 106	< 109	< 128	< 197	< 103	< 101	< 105	< 98.5	< 88.7	< 104	< 115	< 93.4	< 253	< 124	< 98.8	na	na	200		
2,2-Dichloropropane	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	NSE		
2-Butanone (MEK)	< 9.38	< 10.6	< 10.9	< 12.8	< 19.7	< 10.3	< 10.1	< 10.5	< 9.85	< 8.87	< 10.4	< 11.5	< 9.34	< 25.3	< 12.4	< 9.88	na	na	4000		
2-Chlorotoluene	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	100		
2-Hexanone (MBK)	< 9.38	< 10.6	< 10.9	< 12.8	< 19.7	< 10.3	< 10.1	< 10.5	< 9.85	< 8.87	< 10.4	< 11.5	< 9.34	< 25.3	< 12.4	< 9.88	na	na	100,000		
4-Chlorotoluene	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	100		
4-Isopropyltoluene	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	NSE		
4-Methyl-2-pentanone (MIBK)	< 9.38	< 10.6	< 10.9	< 12.8	< 19.7	< 10.3	< 10.1	< 10.5	< 9.85	< 8.87	< 10.4	< 11.5	< 9.34	< 25.3	< 12.4	< 9.88	na	na	400		
Acetone	< 46.9	< 53.2	< 54.6	< 64.1	< 98.4	< 51.6	< 50.4	< 52.6	< 49.2	< 44.3	< 52.1	< 57.5	< 46.7	< 126	< 61.9	< 49.4	na	na	6,000		
Acrylonitrile	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	100,000		
Benzene	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	2,000		
Bromobenzene	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	100		
Bromochloromethane	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	NSE		
Bromodichloromethane	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	100,000		
Bromoform	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	100		
Bromomethane	< 9.38	< 10.6	< 10.9	< 12.8	< 19.7	< 10.3	< 10.1	< 10.5	< 9.85	< 8.87	< 10.4	< 11.5	< 9.34	< 25.3	< 12.4	< 9.88	na	na	500		
Carbon disulfide	< 9.38	< 10.6	< 10.9	< 12.8	< 19.7	< 10.3	< 10.1	< 10.5	< 9.85	< 8.87	< 10.4	< 11.5	< 9.34	< 25.3	< 12.4	< 9.88	na	na	100,000		
Carbon tetrachloride	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	5,000		
Chlorobenzene	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	1,000		
Chloroethane	< 9.38	< 10.6	< 10.9	< 12.8	< 19.7	< 10.3	< 10.1	< 10.5	< 9.85	< 8.87	< 10.4	< 11.5	< 9.34	< 25.3	< 12.4	< 9.88	na	na	100,000		
Chloroform	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	200		
Chloromethane																					

Tufts Street Borings Soil Analytical Summary
With Comparison to MassDEP RCS-1 Reportable Concentrations and Soil Disposal Criteria per Massachusetts Landfill Policy #Comm-97-001
Tufts Street, Somerville, MA

Boring ID	ATC-1		ATC-2		ATC-3		ATC-4		ATC-5		ATC-6		ATC-7		ATC-8		ATC-1 to ATC-8 Composite	ATC-1 to ATC-8 Composite	MCP Reportable Concen- tration RCS-1	MassDEP COMM-97-001 Disposal Criteria	
Sample Depth (feet)	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10		MA Lined Landfill	MA Unlined Landfill
Sample Collection Date	3/15/24		3/15/24		3/15/24		3/14/24		3/14/24		3/14/24		3/14/24		3/14/24		3/15/24				
Analytical Parameter																					
Volatile Organic Compounds (VOCs) by EPA Method 8260C (ug/Kg)																					
Dibromochloromethane	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	5	Total VOCs less than 10,000 ug/Kg	Total VOCs less than 10,000 ug/Kg
Dibromomethane	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	500,000		
Dichlorodifluoromethane (Freon 12)	< 9.38	< 10.6	< 10.9	< 12.8	< 19.7	< 10.3	< 10.1	< 10.5	< 9.85	< 8.87	< 10.4	< 11.5	< 9.34	< 25.3	< 12.4	< 9.88	na	na	NSE		
di-Isopropyl ether	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	100,000		
Ethanol	< 938	< 1060	< 1090	< 1280	< 1970	< 1030	< 1010	< 1050	< 985	< 887	< 1040	< 1150	< 934	< 2530	< 1240	< 988	na	na	100,000		
Ethyl ether	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	100,000		
Ethyl tert-butyl ether	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	NSE		
Ethylbenzene	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	40,000		
Hexachlorobutadiene	< 9.38	< 10.6	< 10.9	< 12.8	< 19.7	< 10.3	< 10.1	< 10.5	< 9.85	< 8.87	< 10.4	< 11.5	< 9.34	< 25.3	< 12.4	< 9.88	na	na	30,000		
Isopropylbenzene	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	1,000,000		
m,p-Xylene	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	NSE		
Methyl tert-butyl ether	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	100		
Methylene Chloride	< 9.38	< 10.6	< 10.9	< 12.8	< 19.7	< 10.3	< 10.1	< 10.5	< 9.85	< 8.87	< 10.4	< 11.5	< 9.34	< 25.3	< 12.4	< 9.88	na	na	100		
Naphthalene	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	4,000		
n-Butylbenzene	< 9.38	< 10.6	< 10.9	< 12.8	< 19.7	< 10.3	< 10.1	< 10.5	< 9.85	< 8.87	< 10.4	< 11.5	< 9.34	< 25.3	< 12.4	< 9.88	na	na	NSE		
N-Propylbenzene	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	100,000		
o-Xylene	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	NSE		
sec-Butylbenzene	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	NSE		
Styrene	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	3,000		
Tert-amyl methyl ether	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	NSE		
tert-Butanol	< 93.8	< 106	< 109	< 128	< 197	< 103	< 101	< 105	< 98.5	< 88.7	< 104	< 115	< 93.4	< 253	< 124	< 98.8	na	na	100,000		
tert-Butylbenzene	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	100,000		
Tetrachloroethene	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	13.4	na	na	1,000		
Tetrahydrofuran	< 9.38	< 10.6	< 10.9	< 12.8	< 19.7	< 10.3	< 10.1	< 10.5	< 9.85	< 8.87	< 10.4	< 11.5	< 9.34	< 25.3	< 12.4	< 9.88	na	na	500,000		
Toluene	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	30,000		
trans-1,2-Dichloroethene	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	1,000		
trans-1,3-Dichloropropene	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	10		
trans-1,4-Dichloro-2-butene	< 23.5	< 26.6	< 27.3	< 32.1	< 49.2	< 25.8	< 25.2	< 26.3	< 24.6	< 22.2	< 26.1	< 28.8	< 23.4	< 63.2	< 31.0	< 24.7	na	na	10,000		
Trichloroethene	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	300		
Trichlorofluoromethane (Freon 11)	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	1,000,000		
Vinyl chloride	< 4.69	< 5.32	< 5.46	< 6.41	< 9.84	< 5.16	< 5.04	< 5.26	< 4.92	< 4.43	< 5.21	< 5.75	< 4.67	< 12.6	< 6.19	< 4.94	na	na	700		
Xylenes, Total	< 14.1	< 16.0	< 16.4	< 19.2	< 29.5	< 15.5	< 15.1	< 15.8	< 14.8	< 13.3	< 15.6	< 17.3	< 14.0	< 37.9	< 18.6	< 14.8	na	na	100,000		
Total VOCs	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13.4					

Tufts Street Borings Soil Analytical Summary
With Comparison to MassDEP RCS-1 Reportable Concentrations and Soil Disposal Criteria per Massachusetts Landfill Policy #Comm-97-001
Tufts Street, Somerville, MA

Boring ID	ATC-1		ATC-2		ATC-3		ATC-4		ATC-5		ATC-6		ATC-7		ATC-8		ATC-1 to ATC-8 Composite	ATC-1 to ATC-8 Composite	MCP Reportable Concentration RCS-1	MassDEP COMM-97-001 Disposal Criteria	
	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10				MA Lined Landfill	MA Unlined Landfill
Sample Depth (feet)	0-5		0-5		0-5		0-5		0-5		0-5		0-5		0-5		0-5	5-10			
Sample Collection Date	3/15/24		3/15/24		3/15/24		3/14/24		3/14/24		3/14/24		3/14/24		3/14/24		3/15/24	3/15/24			
Analytical Parameter																					
Semi-volatile Organic Compounds (SVOCs) with Low Level Polycyclic Aromatic Hydrocarbons (PAHs) by Method 8270D (ug/Kg)																					
1,2,4,5-Tetrachlorobenzene	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 366	< 368	NSE	Total SVOCs less than 100,000 ug/Kg	Total SVOCs less than 100,000 ug/Kg
1,2,4-Trichlorobenzene	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 366	< 368	2,000		
1,2-Dichlorobenzene	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 366	< 368	9,000		
1,3-Dichlorobenzene	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 366	< 368	3,000		
1,4-Dichlorobenzene	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 366	< 368	700		
2,4,5-Trichlorophenol	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 366	< 368	4,000		
2,4,6-Trichlorophenol	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 185	< 186	700		
2,4-Dichlorophenol	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 185	< 186	3,000		
2,4-Dimethylphenol	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 366	< 368	700		
2,4-Dinitrophenol	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 733	< 737	3,000		
2,4-Dinitrotoluene	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 185	< 186	700		
2,6-Dinitrotoluene	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 185	< 186	100,000		
2-Chloronaphthalene	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 366	< 368	1,000,000		
2-Chlorophenol	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 185	< 186	700		
2-Methylphenol	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 366	< 368	500,000		
2-Nitroaniline	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 366	< 368	NSE		
2-Nitrophenol	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 185	< 186	100,000		
3 & 4 Methylphenol	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 366	< 368	500,000		
3,3'-Dichlorobenzidine	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 366	< 368	3,000		
3-Nitroaniline	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 366	< 368	NSE		
4,6-Dinitro-2-methylphenol	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 366	< 368	50,000		
4-Bromophenyl phenyl ether	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 366	< 368	100,000		
4-Chloro-3-methylphenol	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 366	< 368	1,000,000		
4-Chloroaniline	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 185	< 186	1,000		
4-Chlorophenyl phenyl ether	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 366	< 368	1,000,000		
4-Nitroaniline	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 185	< 186	1,000,000		
4-Nitrophenol	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 366	< 368	100,000		
Acetophenone	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 185	< 186	1,000,000		
Aniline	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 366	< 368	1,000,000		
Azobenzene/Diphenyldiazene	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 366	< 368	50,000		
Benzidine	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 733	< 737	10,000		
Benzoic acid	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 740	< 744	1,000,000		
Benzyl alcohol	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 366	< 368	NSE		
bis (2-chloroisopropyl) ether	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 185	< 186	700		
Bis(2-chloroethoxy)methane	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 366	< 368	500,000		
Bis(2-chloroethyl)ether	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 185	< 186	700		
Bis(2-ethylhexyl) phthalate	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 185	< 186	90,000		
Butyl benzyl phthalate	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 366	< 368	100,000		
Carbazole	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 185	< 186	NSE		
Dibenzofuran	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 185	< 186	100,000		
Diethyl phthalate	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 366	< 368	10,000		
Dimethyl phthalate	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 366	< 368	700		
Di-n-butyl phthalate	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 366	< 368	50,000		
Di-n-octyl phthalate	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 366	< 368	1,000,000		
Hexachlorobenzene	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 185	< 186	700		
Hexachlorobutadiene	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 185	< 186	30,000		
Hexachlorocyclopentadiene	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 185	< 186	50,000		
Hexachloroethane	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 185	< 186	700		

Tufts Street Borings Soil Analytical Summary
With Comparison to MassDEP RCS-1 Reportable Concentrations and Soil Disposal Criteria per Massachusetts Landfill Policy #Comm-97-001
Tufts Street, Somerville, MA

Boring ID	ATC-1		ATC-2		ATC-3		ATC-4		ATC-5		ATC-6		ATC-7		ATC-8		ATC-1 to ATC-8 Composite	ATC-1 to ATC-8 Composite	MCP Reportable Concentration RCS-1	MassDEP COMM-97-001 Disposal Criteria	
Sample Depth (feet)	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10		MA Lined Landfill	MA Unlined Landfill
Sample Collection Date	3/15/24		3/15/24		3/15/24		3/14/24		3/14/24		3/14/24		3/14/24		3/14/24		3/15/24				
Analytical Parameter																					
Semi-volatile Organic Compounds (SVOCs) with Low Level Polycyclic Aromatic Hydrocarbons (PAHs) by Method 8270D (ug/Kg)																					
Isophorone	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 185	< 186	100,000	Total SVOCs less than 100,000 ug/Kg	Total SVOCs less than 100,000 ug/Kg
Nitrobenzene	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 185	< 186	500,000		
N-Nitrosodimethylamine	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 185	< 186	50,000		
N-Nitrosodi-n-propylamine	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 185	< 186	50,000		
N-Nitrosodiphenylamine	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 366	< 368	100,000		
Pentachloronitrobenzene	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 366	< 368	NSE		
Pentachlorophenol	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 366	< 368	3,000		
Phenol	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 366	< 368	10,000		
Pyridine	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 366	< 368	500		
1-Methylnaphthalene	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 17.8	< 17.9	NSE		
2-Methylnaphthalene	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 17.8	< 17.9	700		
Acenaphthene	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 17.8	< 17.9	4,000		
Acenaphthylene	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	28.7	< 17.9	1,000		
Anthracene	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	33.8	< 17.9	1,000,000		
Benzo[a]anthracene	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	148	< 17.9	7,000		
Benzo[a]pyrene	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	175	< 17.9	2,000		
Benzo[b]fluoranthene	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	179	< 17.9	7,000		
Benzo[g,h,i]perylene	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	136	< 17.9	1,000,000		
Benzo[k]fluoranthene	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	165	< 17.9	70,000		
Bis(2-ethylhexyl) phthalate	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	50.8	< 37.2	90,000		
Chrysene	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	156	< 17.9	70,000		
Dibenz(a,h)anthracene	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	41.0	< 17.9	700		
Fluoranthene	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	256	< 17.9	1,000,000		
Fluorene	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 17.8	< 17.9	1,000,000		
Indeno[1,2,3-cd]pyrene	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	112	< 17.9	7,000		
Naphthalene	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 17.8	< 17.9	4,000		
Phenanthrene	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	102	< 17.9	10,000		
Pyrene	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	259	< 17.9	1,000		
Total SVOCs	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	1842.3	ND			

Tufts Street Borings Soil Analytical Summary
With Comparison to MassDEP RCS-1 Reportable Concentrations and Soil Disposal Criteria per Massachusetts Landfill Policy #Comm-97-001
Tufts Street, Somerville, MA

Boring ID	ATC-1		ATC-2		ATC-3		ATC-4		ATC-5		ATC-6		ATC-7		ATC-8		ATC-1 to ATC-8 Composite	ATC-1 to ATC-8 Composite	MCP Reportable Concentration RCS-1	MassDEP COMM-97-001 Disposal Criteria		
Sample Depth (feet)	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10		MA Lined Landfill	MA Unlined Landfill	
Sample Collection Date	3/15/24		3/15/24		3/15/24		3/14/24		3/14/24		3/14/24		3/14/24		3/14/24		3/15/24	3/15/24				
Analytical Parameter																						
Polychlorinated Biphenyls (PCBs) by EPA Method 8082 (ug/Kg)																						
PCB-1016	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 21.9	< 22.1	1,000	Total PCBs less than 2,000 ug/Kg	Total PCBs less than 2,000 ug/Kg
PCB-1221	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 21.9	< 22.1	1,000		
PCB-1232	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 21.9	< 22.1	1,000		
PCB-1242	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 21.9	< 22.1	1,000		
PCB-1248	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 21.9	< 22.1	1,000		
PCB-1254	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 21.9	< 22.1	1,000		
PCB-1260	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 21.9	< 22.1	1,000		
PCB-1262	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 21.9	< 22.1	1,000		
PCB-1268	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 21.9	< 22.1	1,000		
Total PCBs	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	<21.9	<21.9	1,000		
Total Extractable Petroleum Hydrocarbons (TEPH) by EPA Method 8100 (mg/Kg)																						
TEPH (C9-C36)	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	90.2	16.7	1,000	5,000	2,500
Metals by EPA Methods 6010D / 7171A (mg/Kg)																						
Arsenic	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 3.15	3.60	20	40	40
Barium	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	45.9	39.3	1,000	NSE	NSE
Cadmium	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 1.05	< 0.961	70	80	30
Chromium	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	13.6	17.4	100	1,000	1,000
Lead	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	21.0	5.34	200	2,000	1,000
Mercury	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 0.0530	< 0.0512	20	10	10
Selenium	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 3.15	< 2.88	400	NSE	NSE
Silver	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 3.15	< 2.88	100	NSE	NSE
General Chemistry																						
Flashpoint by EPA Method 1010A (Degrees Fahrenheit)	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	>184	>170	NSE	NSE	NSE
Cyanide, Reactive by EPA Method 9012 (mg/Kg)	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 57.7	< 59.9	NSE	NSE	NSE
Sulfide, Reactive by EPA Method 9034 (mg/Kg)	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	< 154	< 160	NSE	NSE	NSE
pH (Corrosivity) by EPA Method 9045D (SU)	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	8.4	7.9	NSE	NSE	NSE
Temperature by EPA Method 9045D (Degrees Celsius)	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	23.4	23.4	NSE	NSE	NSE
Total Organic Carbon by EPA Method 9060 (mg/Kg)	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	4,780	1,620	NSE	NSE	NSE
Specific Conductance by EPA Method SM 2510B (us/cm)	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	1,200	601	NSE	8,000	4,000

Notes:

MCP = Massachusetts Contingency Plan; 310 CMR 40.0000

RCS-1 = Reportable Concentration per MCP

Comm-97-001 = MassDEP policy # Comm 97-001 Reuse and Disposal of Contaminated Soil at Massachusetts Landfills

ug/Kg = micrograms per kilogram

mg/Kg = milligrams per kilogram

SU = standard unit

us/cm = microsiemens per centimeter

Bold type indicates detected concentration above laboratory method reporting limit

na = not analyzed

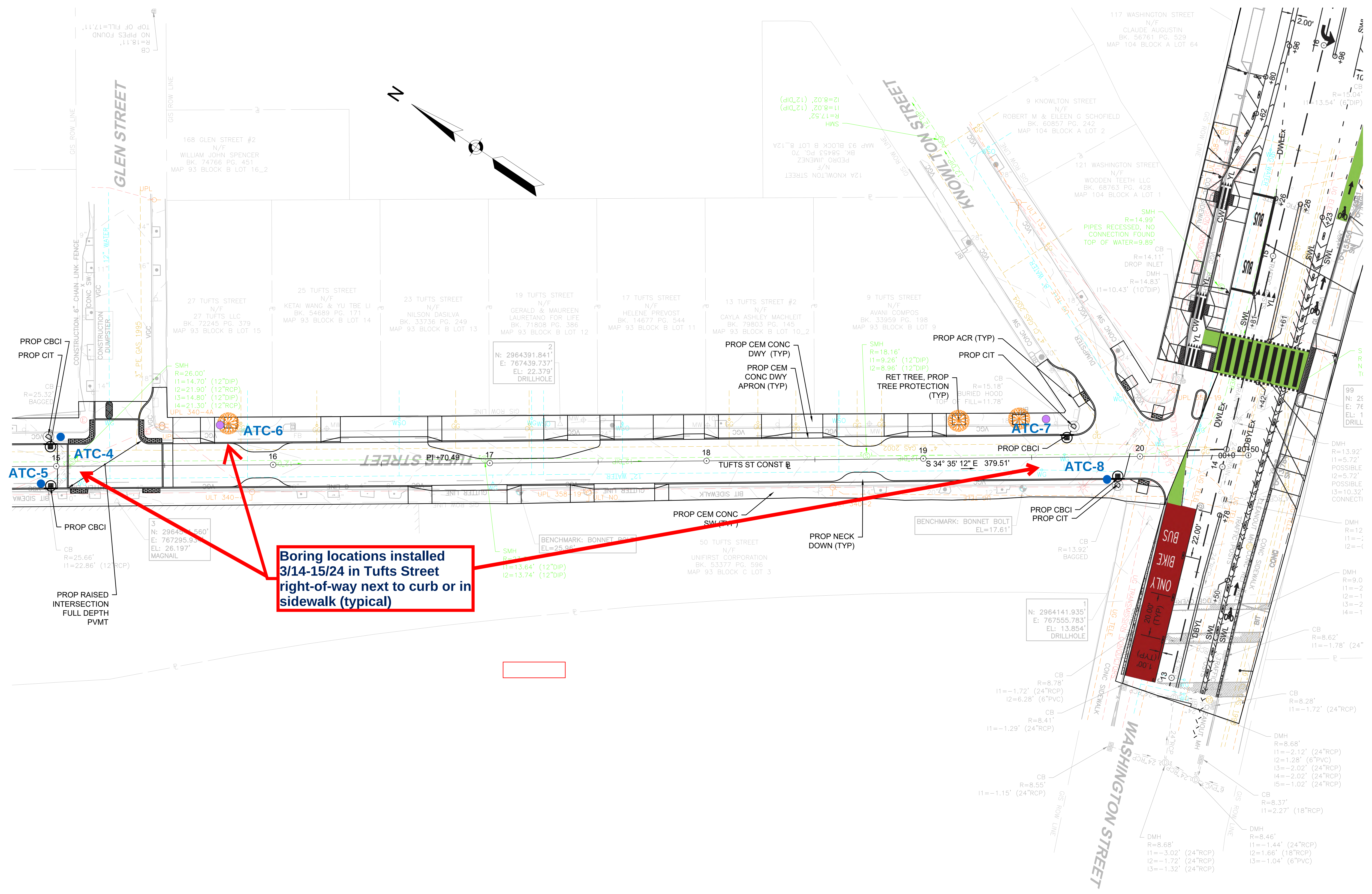
ND = Not detected above laboratory method reporting limit

NSE = No standard established



APPENDIX A

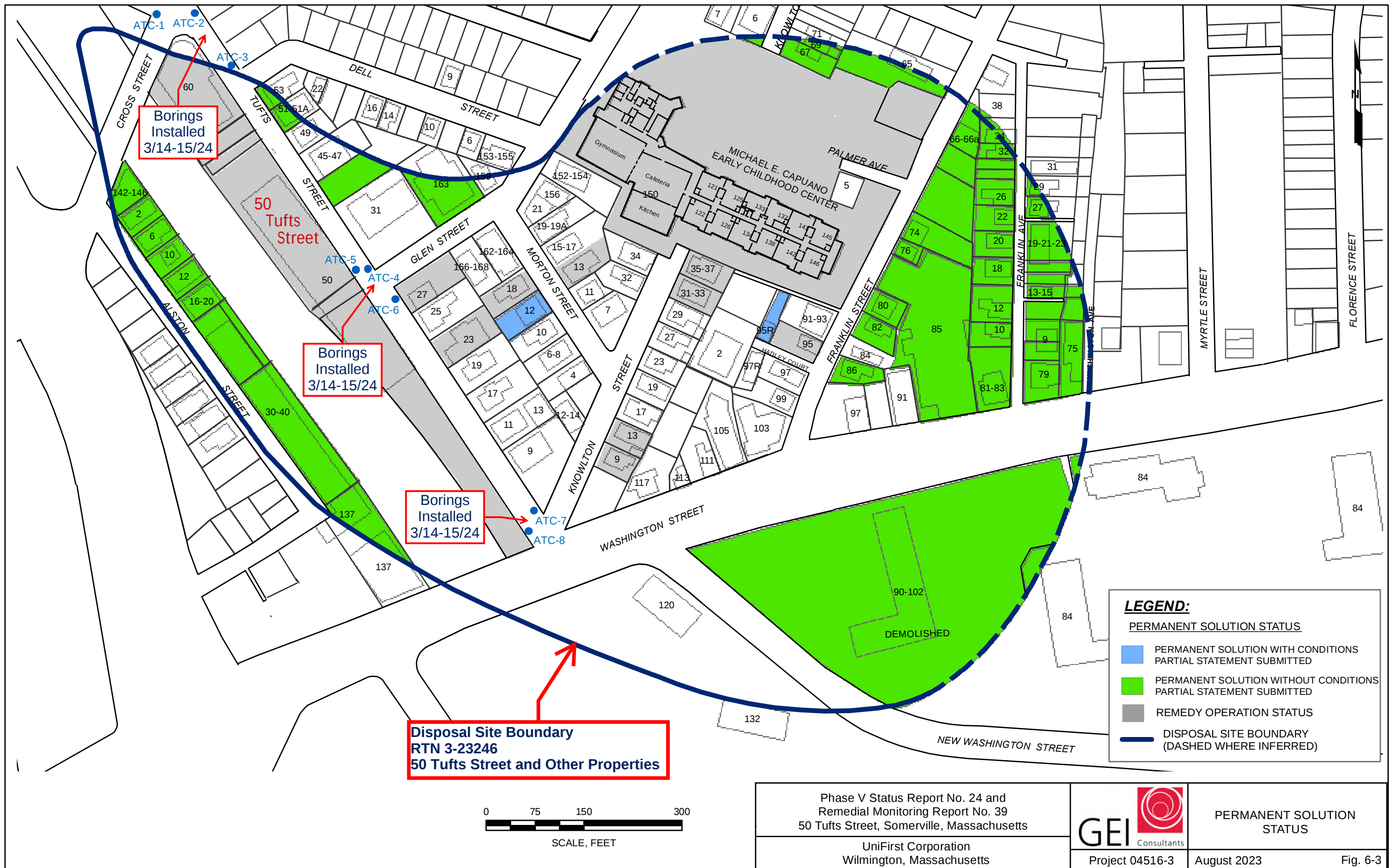
CITY OF SOMERVILLE CONSTRUCTION CONCEPT PLANS

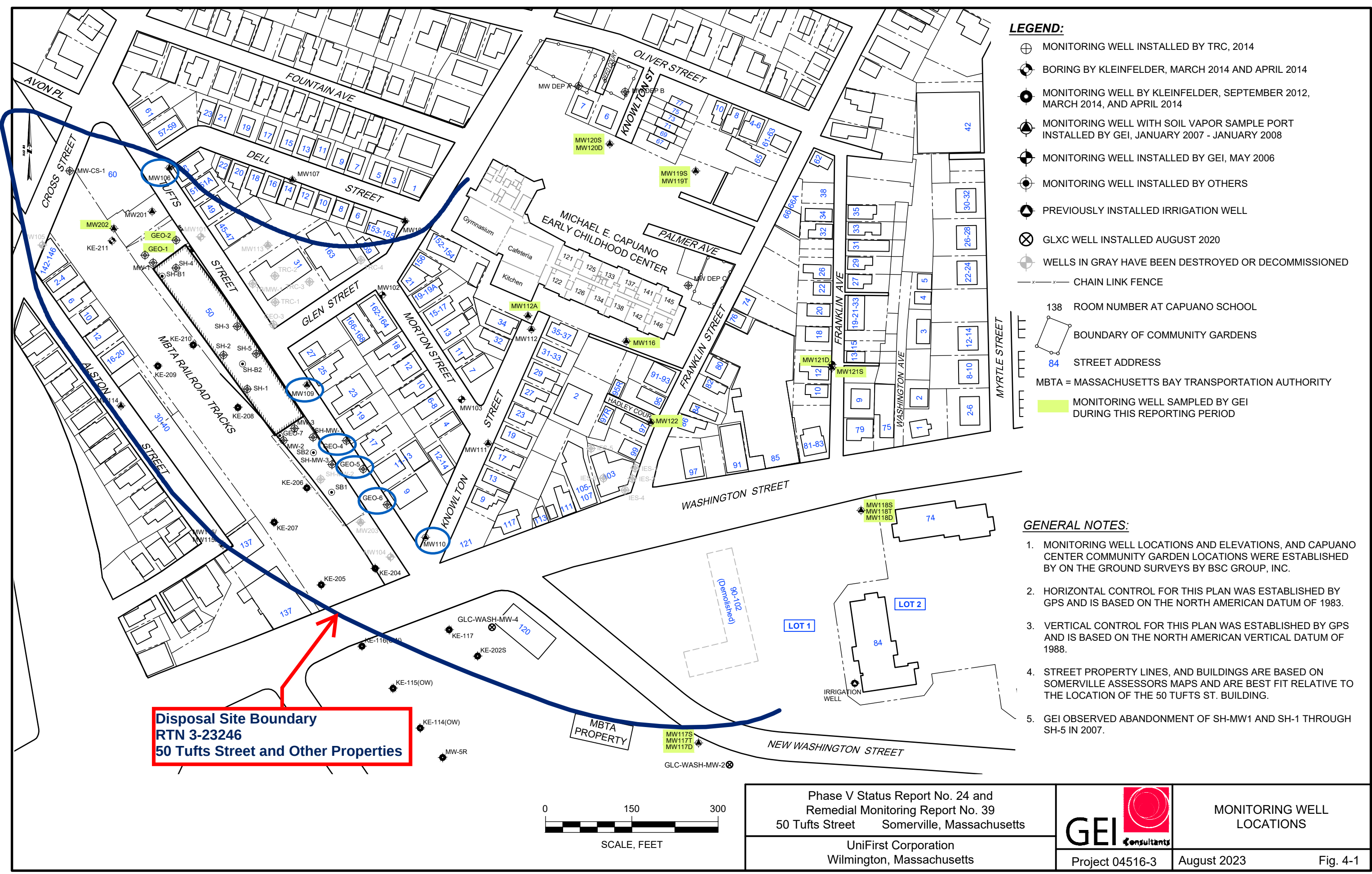


**Boring locations installed
3/14-15/24 in Tufts Street
right-of-way next to curb or in
sidewalk (typical)**



APPENDIX B
RTN 3-23246 SITE PLANS





LEGEND:

- ⊕ MONITORING WELL INSTALLED BY TRC, 2014
- ⊙ BORING BY KLEINFELDER, MARCH 2014 AND APRIL 2014
- MONITORING WELL BY KLEINFELDER, SEPTEMBER 2012, MARCH 2014, AND APRIL 2014
- ⊖ MONITORING WELL WITH SOIL VAPOR SAMPLE PORT INSTALLED BY GEI, JANUARY 2007 - JANUARY 2008
- ⊙ MONITORING WELL INSTALLED BY GEI, MAY 2006
- ⊙ MONITORING WELL INSTALLED BY OTHERS
- ⊙ PREVIOUSLY INSTALLED IRRIGATION WELL
- ⊗ GLXC WELL INSTALLED AUGUST 2020
- ⊙ WELLS IN GRAY HAVE BEEN DESTROYED OR DECOMMISSIONED
- x — CHAIN LINK FENCE
- 138 ROOM NUMBER AT CAPUANO SCHOOL
- BOUNDARY OF COMMUNITY GARDENS
- 84 STREET ADDRESS
- MBTA = MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
- MONITORING WELL SAMPLED BY GEI DURING THIS REPORTING PERIOD

- GENERAL NOTES:**
1. MONITORING WELL LOCATIONS AND ELEVATIONS, AND CAPUANO CENTER COMMUNITY GARDEN LOCATIONS WERE ESTABLISHED BY ON THE GROUND SURVEYS BY BSC GROUP, INC.
 2. HORIZONTAL CONTROL FOR THIS PLAN WAS ESTABLISHED BY GPS AND IS BASED ON THE NORTH AMERICAN DATUM OF 1983.
 3. VERTICAL CONTROL FOR THIS PLAN WAS ESTABLISHED BY GPS AND IS BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988.
 4. STREET PROPERTY LINES, AND BUILDINGS ARE BASED ON SOMERVILLE ASSESSORS MAPS AND ARE BEST FIT RELATIVE TO THE LOCATION OF THE 50 TUFTS ST. BUILDING.
 5. GEI OBSERVED ABANDONMENT OF SH-MW1 AND SH-1 THROUGH SH-5 IN 2007.



APPENDIX C

GPRS REPORT



JOB SUMMARY REPORT

Order Number:	Work Order #638432	Job Date:	Mar 8, 2024 7:44:00 AM
Customer:	82605 ATC GROUP SERVICES LLC DBA ATLAS TECHNICAL CONSULTANTS : ATLAS TECHNICAL CONSULTANTS LLC	Billing Address:	ATLAS TECHNICAL CONSULTANTS LLC 5750 JOHNSTON ST STE 400 LAFAYETTE LA 70503 United States

JOB DETAILS

Jobsite Location	Tufts Street, Somerville, Massachusetts, 02145
Work Order Number	Work Order #638432
Job Number	
PO Number	6000007464

GPRS Project Manager: Michael Layon

Thank you for using GPRS on your project. We appreciate the opportunity to work with you. If you have questions regarding the results of this scanning, please contact the lead GPRS project manager on this project.

EQUIPMENT USED

The following equipment was used on this project:

- **Underground GPR Antenna:** This GPR Antenna uses frequencies ranging from 250 MHz to 450 MHz and is mounted in a stroller frame that rolls over the surface. Data is displayed on a screen and marked in the field in real time. The surface needs to be reasonably smooth and unobstructed to obtain readable scans. Obstructions such as curbs, landscaping, and vegetation will limit the efficacy of GPR. The total effective scan depth can be as much as 8' or more with this antenna but can vary widely depending on the soil conditions and composition. Some soil types, such as clay, may limit maximum depths to 3' or less. As depth increases, targets must be larger to be detected, and non-metallic targets can be challenging to locate. The depths provided should always be treated as estimates as their accuracy can be affected by multiple factors. For more information, please visit: [Link](#)
- **EM Pipe Locator:** Electromagnetic Pipe and Cable Locator. Detects electromagnetic fields. Used to actively trace conductive pipes and tracer wires, or passively detect power and radio signals traveling along conductive pipes and utilities. For more information, please visit: [Link](#)
- **GPS:** This handheld unit offers accuracy down to 4 inches; however, the accuracy achieved will depend on the satellite environment at the time of collection and is not considered survey-grade. Features can be collected as points, lines, or areas and then exported as a KML/KMZ or overlaid on a CAD drawing. For more information, please visit: [Link](#)



JOB SUMMARY REPORT

WORK PERFORMED

UNDERGROUND UTILITY

Client Provided Drawings	No
Client completed 811 locate request	Yes
Scope of Work	Scan for utilities a 20'x20' area around 8 soil boring locations along Tufts st in Somerville MA. Mark, map and document findings.
Soil Borings (qty)	10
Limitations Encountered	- Surface obstructions - Utilities too deep to locate
Limitations Encountered - Other	see notes
Marking Medium	- Spray Paint
Results Notes	The following findings were found within the ~20' scan radius around 8 soil borings: ATC-1 (area 7): Gas line located via GPR by trench line data at an unknown depth. Water line was located ~4'-5'. Electrical line was located ~2'-3'. Communication line was identified, no depth available. Max GPR depth was found to be ~2'. ATC-2 (area 6): Gas line ~2'-3'. Water line ~3'-4'. Electrical line ~2'-3'. Unknown line ~1'-2'. Max GPR depth was found to be ~2'. ATC-3 (area 5): Gas line could not be confirmed in this location due to pipe composition and could not induce a signal. Water line ~5'-6'. Sanitary/storm line depth could not be confirmed due to depth of line. Unknown manhole filled with water, could not determine depth or direction. Power pole with no drops. Debris on sidewalk limited scanning ability in sidewalk area. Max GPR depth was found to be ~1'. ATC-4/5 (area 4): Gas line ~1'-2'. Water line 5'-6'. Storm lines ~2'-3'. Sanitary line ~9'-10'. Max GPR depth was found to be ~2'. ATC-6 (area 3): Gas line ~1'-2'. No power detected. Max GPR depth was found to be ~2'. ATC-7 (area 2): Gas line ~1'-2'. No power detected. Max GPR depth was found to be ~1.5'. ATC-8 (area 1): Electrical line ~2'-3'. Communication line ~1'-2'. Max GPR depth was found to be ~2'. Due to limitations mentioned above (limited GPR data depth, debris), client is advised to proceed with caution outside scan area, near any marked lines and below GPR depth. For more site pictures and information please refer to associated mapping.



JOB SUMMARY REPORT

JOB SITE IMAGES



Jobsite Photo #1



Jobsite Photo #2



Jobsite Photo #3



JOB SUMMARY REPORT



Jobsite Photo #4



Jobsite Photo #5



Jobsite Photo #6



JOB SUMMARY REPORT



Jobsite Photo #7



Jobsite Photo #8



Jobsite Photo #9



JOB SUMMARY REPORT

CONTACT / SIGNATURE INFORMATION

Contact Information

Contact Name	Stephan Landry	Email	stephan.landry@oneatlas.com
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TERMS & CONDITIONS

<http://www.gprsinc.com/termsandconditions.html>



APPENDIX D

BORING LOGS

BORING/MONITORING WELL LOG

 Atlas Technical Consultants LLC 10 State Street, Suite 100 Woburn, MA 01801 Phone: (781) 932-9400 Fax: (781) 932-6211						SITE: Tuft Street Improvement Project DATE: 3/15/2024 CLIENT: City of Somerville DRILLING CO.: Geosearch DRILLING METHOD: Direct Push Geoprobe SAMPLER METHOD: Hand auger with vactor, and macrocore AUGER DIAMETER:		WELL/BORING NO.: ATC-1 WEATHER: cloudy, 40's Atlas INSPECTOR: Eric Marchese SURFACE ELEVATION: not surveyed DEPTH TO WATER: (feet) ~6 Atlas Project Number: 6000007464 Phase Number: 02	
Sample Interval (feet)	Recovery/ Penetration (in/in)	Blow Counts (per 6")	PID readings (ppmv)	Depth (feet)	Soil Log	Materials Description (color, density, size, major and minor constituents, moisture) no well installed	Well Construction (none)		
0-5			0.0	1		9 inches asphalt Pre-clear to 5 ft	CEMENT SEAL: (Depth Interval) N/A		
			0.0	2		Brown and black, fine to coarse SAND, trace silt, trace fine gravel, trace cobble, no odors or staining	NATURAL FILL: N/A		
			0.0	3			BENTONITE SEAL: N/A		
			0.0	4			FILTER SAND: N/A		
			0.0	5			SOLID PVC RISER: N/A		
5-10	39/60		0.0 (5-8)	6		Brown and black, fine to coarse SAND, trace silt, trace fine gravel, trace cobble, no odors or staining	PVC SCREEN: N/A		
			0.0 (8-10)	7					
				8					
				9		Grey and brown, CLAY and SILT, no odor or staining			
				10					
				11		End of boring at 10 feet			
				12					
				13					
				14					
				15					
				16					
				17					
				18					
				19					
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				22					
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				30					
				31					
				32					
				33					
				34					
				35					

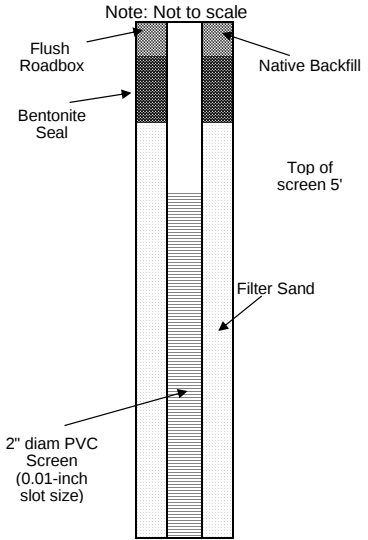
COMMENTS:
 Sampled for VOC/8260 from 0-5 and 5-10 interval

GRANULAR SOILS COHESIVELESS DENSITY
 0-4 Very Loose
 5-9 Loose
 10-29 Medium Dense
 30-49 Dense
 50+ Very Dense

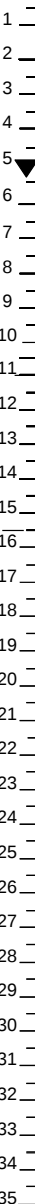
PROPORTIONS USED
 Trace 0-10%
 Little 10-20%
 Some 20-35%
 And 35-50%

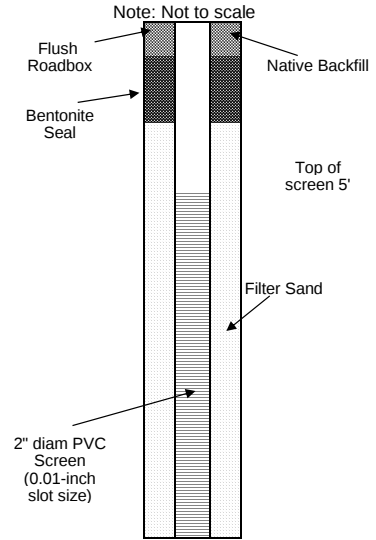
LEGEND:
 ND = Not Detected
 NA = Not Applicable
 GS = Ground Surface

Note: Not to scale

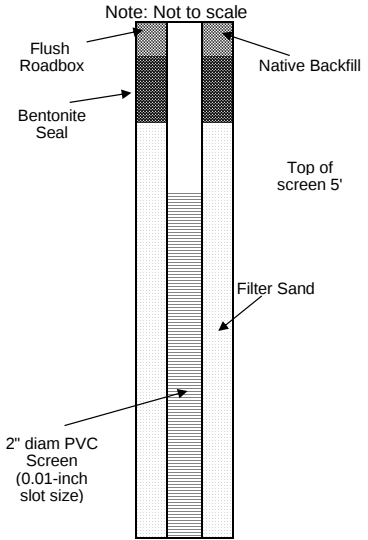


BORING/MONITORING WELL LOG

 Atlas Technical Consultants LLC 10 State Street, Suite 100 Woburn, MA 01801 Phone: (781) 932-9400 Fax: (781) 932-6211						SITE: Tuft Street Improvement Project DATE: 3/15/2024 CLIENT: City of Somerville DRILLING CO.: Geosearch DRILLING METHOD: Direct Push Geoprobe SAMPLER METHOD: Hand auger with vector, and macrocore AUGER DIAMETER:		WELL/BORING NO.: ATC-2 WEATHER: cloudy, 40's Atlas INSPECTOR: Eric Marchese SURFACE ELEVATION: not surveyed DEPTH TO WATER: ~5.5 Atlas Project Number: 6000007464 Phase Number: 02	
Sample Interval (feet)	Recovery/ Penetration (in/in)	Blow Counts (per 6")	PID readings (ppmv)	Depth (feet)	Soil Log	Materials Description (color, density, size, major and minor constituents, moisture) no well installed	Well Construction (none)		
0-5			0.0	1		9 inches asphalt Pre-clear to 5 ft Light to dark brown, fine to coarse SAND, trace silt, trace fine gravel, trace cobble, no odors or staining	(Depth Interval) CEMENT SEAL: N/A NATURAL FILL: N/A BENTONITE SEAL: N/A FILTER SAND: N/A SOLID PVC RISER: N/A PVC SCREEN: N/A		
			0.0	2					
			0.0	3					
			0.0	4					
			0.0	5					
				6		Grey green, very fine SAND and CLAY			
				7					
5-10	42/60		0.0 (5-10)	8					
				9					
				10					
				11		End of boring at 10 feet			
				12					
				13					
				14					
				15					
				16					
				17					
				18					
				19					
				20					
				21					
				22					
				23					
				24					
				25					
				26					
				27					
				28					
				29					
				30					
				31					
				32					
				33					
				34					
				35					
COMMENTS: Sampled for VOC/8260 from 0-5 and 5-10 interval						LEGEND: ND = Not Detected NA = Not Applicable GS = Ground Surface			
GRANULAR SOILS COHESIVELESS DENSITY 0-4 Very Loose 5-9 Loose 10-29 Medium Dense 30-49 Dense 50+ Very Dense									
PROPORTIONS USED Trace 0-10% Little 10-20% Some 20-35% And 35-50%									



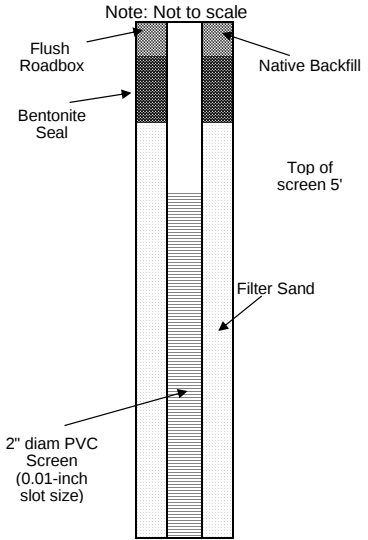
BORING/MONITORING WELL LOG

 Atlas Technical Consultants LLC 10 State Street, Suite 100 Woburn, MA 01801 Phone: (781) 932-9400 Fax: (781) 932-6211						SITE: Tuft Street Improvement Project DATE: 3/15/2024 CLIENT: City of Somerville DRILLING CO.: Geosearch DRILLING METHOD: Direct Push Geoprobe SAMPLER METHOD: Hand auger with vactor, and macrocore AUGER DIAMETER:		WELL/BORING NO.: ATC-3 WEATHER: cloudy, 40's Atlas INSPECTOR: Eric Marchese SURFACE ELEVATION: not surveyed DEPTH TO WATER: ~7 Atlas Project Number: 6000007464 Phase Number: 02	
Sample Interval (feet)	Recovery/ Penetration (in/in)	Blow Counts (per 6")	PID readings (ppmv)	Depth (feet)	Soil Log	Materials Description (color, density, size, major and minor constituents, moisture) no well installed	Well Construction (none)		
0-5			0.0 0.0 0.0 0.0 0.0 0.0 (5-6)	1 2 3 4 5 6 7		6 inches asphalt Pre-clear to 5 ft Dark brown and black, fine to coarse SAND, trace silt, trace fine gravel, trace cobble, trace brick debris, no odors or staining	(Depth Interval) CEMENT SEAL: N/A NATURAL FILL: N/A BENTONITE SEAL: N/A FILTER SAND: N/A SOLID PVC RISER: N/A PVC SCREEN: N/A		
5-10	36/60		0.0 (6-10)	7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35		Dark to light brown, fine SAND and some CLAY, trace fine gravel End of boring at 10 feet	Note: Not to scale 		
COMMENTS: Sampled for VOC/8260 from 0-5 and 5-10 interval						GRANULAR SOILS COHESIVELESS DENSITY 0-4 Very Loose 5-9 Loose 10-29 Medium Dense 30-49 Dense 50+ Very Dense PROPORTIONS USED Trace 0-10% Little 10-20% Some 20-35% And 35-50%		LEGEND: ND = Not Detected NA = Not Applicable GS = Ground Surface	

BORING/MONITORING WELL LOG

 Atlas Technical Consultants LLC 10 State Street, Suite 100 Woburn, MA 01801 Phone: (781) 932-9400 Fax: (781) 932-6211						SITE: Tuft Street Improvement Project DATE: 3/14/2024 CLIENT: City of Somerville DRILLING CO.: Geosearch DRILLING METHOD: Direct Push Geoprobe SAMPLER METHOD: Hand auger with vactor, and macrocore AUGER DIAMETER:		WELL/BORING NO.: ATC-4 WEATHER: cloudy, 40's Atlas INSPECTOR: Eric Marchese SURFACE ELEVATION: Unknown DEPTH TO WATER: ~8 Atlas Project Number: 6000007464 Phase Number: 02	
Sample Interval (feet)	Recovery/ Penetration (in/in)	Blow Counts (per 6")	PID readings (ppmv)	Depth (feet)	Soil Log	Materials Description (color, density, size, major and minor constituents, moisture)	Well Construction (none)		
0-5			0.0 0.0 0.0 0.0 0.0	1 2 3 4 5 6		4 inches asphalt Pre-clear to 5 ft Light brown to grey, coarse to fine SAND, trace silt, trace fine gravel, trace cobble, dry, no odors or staining	(Depth Interval) CEMENT SEAL: N/A NATURAL FILL: N/A BENTONITE SEAL: N/A FILTER SAND: N/A SOLID PVC RISER: N/A PVC SCREEN: N/A		
5-10	42/60		0.0 (5-10)	7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35		Light to dark brown, coarse to medium SAND, trace silt, trace fine gravel, no odors or staining End of boring at 10 feet	Note: Not to scale Flush Roadbox Bentonite Seal Native Backfill Top of screen 5' Filter Sand 2" diam PVC Screen (0.01-inch slot size)		
COMMENTS: Sampled for VOC/8260 from 0-5 and 5-10 interval						GRANULAR SOILS COHESIVELESS DENSITY 0-4 Very Loose 5-9 Loose 10-29 Medium Dense 30-49 Dense 50+ Very Dense PROPORTIONS USED Trace 0-10% Little 10-20% Some 20-35% And 35-50%		LEGEND: ND = Not Detected NA = Not Applicable GS = Ground Surface	

BORING/MONITORING WELL LOG

 Atlas Technical Consultants LLC 10 State Street, Suite 100 Woburn, MA 01801 Phone: (781) 932-9400 Fax: (781) 932-6211						SITE: Tuft Street Improvement Project DATE: 3/14/2024 CLIENT: City of Somerville DRILLING CO.: Geosearch DRILLING METHOD: Direct Push Geoprobe SAMPLER METHOD: Hand auger with vactor, and macrocore AUGER DIAMETER:		WELL/BORING NO.: ATC-5 WEATHER: cloudy, 40's Atlas INSPECTOR: Eric Marchese SURFACE ELEVATION: Unknown DEPTH TO WATER: ~8 Atlas Project Number: 6000007464 Phase Number: 02	
Sample Interval (feet)	Recovery/ Penetration (in/in)	Blow Counts (per 6")	PID readings (ppmv)	Depth (feet)	Soil Log	Materials Description (color, density, size, major and minor constituents, moisture) no well constructed	Well Construction (none)		
0-5			0.0	1	4 inches asphalt Pre-clear to 5 ft Brown and black, fine to coarse SAND, trace silt, trace fine gravel, trace cobble, moist toward bottom, no odors or staining	CEMENT SEAL: (Depth Interval) N/A NATURAL FILL: N/A BENTONITE SEAL: N/A FILTER SAND: N/A SOLID PVC RISER: N/A PVC SCREEN: N/A			
			0.0	2					
			0.0	3					
			0.0	4	Brown and black, fine to coarse SAND, trace silt, trace fine gravel, no odors or staining	Note: Not to scale 			
			0.0	5					
			0.0	6					
5-10	52/60		0.0 (5-10)	7	End of boring at 10 feet				
				8					
				9					
				10					
				11					
				12					
				13					
				14					
				15					
				16					
				17					
				18					
				19					
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				26					
				27					
				28					
				29					
				30					
				31					
				32					
				33					
				34					
				35					

COMMENTS: Sampled for VOC/8260 from 0-5 and 5-10 interval	GRANULAR SOILS COHESIVELESS DENSITY 0-4 Very Loose 5-9 Loose 10-29 Medium Dense 30-49 Dense 50+ Very Dense PROPORTIONS USED Trace 0-10% Little 10-20% Some 20-35% And 35-50%	LEGEND: ND = Not Detected NA = Not Applicable GS = Ground Surface
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Atlas Technical Consultants LLC 10 State Street, Suite 100 Woburn, MA 01801 Phone: (781) 932-9400 Fax: (781) 932-6211						SITE: Tuft Street Improvement Project DATE: 3/14/2024 CLIENT: City of Somerville DRILLING CO.: Geosearch DRILLING METHOD: Direct Push Geoprobe SAMPLER METHOD: Hand auger with vactor, and macrocore AUGER DIAMETER:		WELL/BORING NO.: ATC-6 WEATHER: cloudy, 40's Atlas INSPECTOR: Eric Marchese SURFACE ELEVATION: Unknown DEPTH TO WATER: ~6 Atlas Project Number: 6000007464 Phase Number: 02	
Sample Interval (feet)	Recovery/ Penetration (in/in)	Blow Counts (per 6")	PID readings (ppmv)	Depth (feet)	Soil Log	Materials Description (color, density, size, major and minor constituents, moisture) no well constructed	Well Construction		
0-5			0.0	1		Drilled in sidewalk, 6 inches concrete Pre-clear to 5 ft	(Depth Interval) CEMENT SEAL: N/A		
			0.0	2		Light brown and black, fine to medium SAND, trace silt, trace fine gravel, trace cobble, no odors or staining	NATURAL FILL: N/A		
			0.0	3			BENTONITE SEAL: N/A		
			0.0	4			FILTER SAND: N/A		
			0.0	5			SOLID PVC RISER: N/A		
5-10	36/60		0.0 (5-10)	6		Light brown and black, fine to medium SAND, trace silt, trace fine gravel, no odors or staining	PVC SCREEN: N/A		
				7					
				8					
				9					
				10					
				11		End of boring at 10 feet			
				12					
				13					
				14					
				15					
				16					
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				33					
				34					
				35					

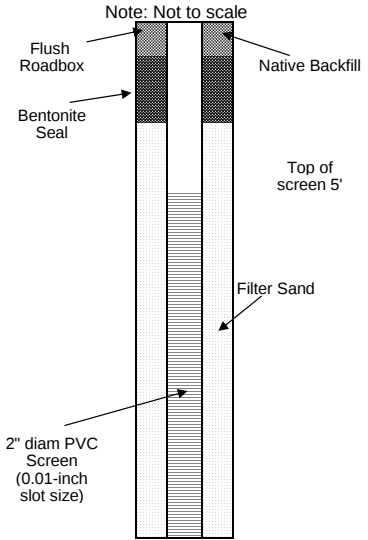
COMMENTS:
Sampled for VOC/8260 from 0-5 and 5-10 interval

GRANULAR SOILS COHESIVELESS DENSITY
0-4 Very Loose
5-9 Loose
10-29 Medium Dense
30-49 Dense
50+ Very Dense

PROPORTIONS USED
Trace 0-10%
Little 10-20%
Some 20-35%
And 35-50%

LEGEND:
ND = Not Detected
NA = Not Applicable
GS = Ground Surface

BORING/MONITORING WELL LOG

 Atlas Technical Consultants LLC 10 State Street, Suite 100 Woburn, MA 01801 Phone: (781) 932-9400 Fax: (781) 932-6211						SITE: Tuft Street Improvement Project DATE: 3/14/2024 CLIENT: City of Somerville DRILLING CO.: Geosearch DRILLING METHOD: Direct Push Geoprobe SAMPLER METHOD: Hand auger with vactor, and macrocore AUGER DIAMETER:		WELL/BORING NO.: ATC-7 WEATHER: cloudy, 40's Atlas INSPECTOR: Eric Marchese SURFACE ELEVATION: not surveyed DEPTH TO WATER: ~6 Atlas Project Number: 6000007464 Phase Number: 02	
Sample Interval (feet)	Recovery/ Penetration (in/in)	Blow Counts (per 6")	PID readings (ppmv)	Depth (feet)	Soil Log	Materials Description (color, density, size, major and minor constituents, moisture) no well constructed	Well Construction (none)		
0-5			0.0 0.0 0.0 0.0 0.0	1 2 3 4 5		Drilled in sidewalk, 6 inches concrete Pre-clear to 5 ft Light and dark brown, medium to fine SAND, trace silt, trace fine gravel, whole bricks and brick debris, dry, no odors or staining	(Depth Interval) CEMENT SEAL: N/A NATURAL FILL: N/A BENTONITE SEAL: N/A FILTER SAND: N/A SOLID PVC RISER: N/A PVC SCREEN: N/A		
5-10	60/60		0.0 (6-10) ft.	6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35		Grey and brown, CLAY with trace fine sand and silt, wet End of boring at 10 feet	Note: Not to scale 		
COMMENTS: Sampled for VOC/8260 from 0-5 and 5-10 interval						GRANULAR SOILS COHESIVELESS DENSITY 0-4 Very Loose 5-9 Loose 10-29 Medium Dense 30-49 Dense 50+ Very Dense PROPORTIONS USED Trace 0-10% Little 10-20% Some 20-35% And 35-50%		LEGEND: ND = Not Detected NA = Not Applicable GS = Ground Surface	

BORING/MONITORING WELL LOG

 Atlas Technical Consultants LLC 10 State Street, Suite 100 Woburn, MA 01801 Phone: (781) 932-9400 Fax: (781) 932-6211						SITE: Tuft Street Improvement Project DATE: 3/14/2024 CLIENT: City of Somerville DRILLING CO.: Geosearch DRILLING METHOD: Direct Push Geoprobe SAMPLER METHOD: Hand auger with vactor, and macrocore AUGER DIAMETER:		WELL/BORING NO.: ATC-8 WEATHER: cloudy, 40's Atlas INSPECTOR: Eric Marchese SURFACE ELEVATION: not surveyed DEPTH TO WATER: ~5.5 Atlas Project Number: 6000007464 Phase Number: 02	
Sample Interval (feet)	Recovery/ Penetration (in/in)	Blow Counts (per 6")	PID readings (ppm)	Depth (feet)	Soil Log	Materials Description (color, density, size, major and minor constituents, moisture) no well constructed	Well Construction (none)		
0-5			0.0 0.0 0.0 0.0 0.0	1 2 3 4 5		4 inches asphalt Pre-clear to 5 ft Light and dark brown, medium to fine SAND, some silt, trace fine gravel, moist around 5.5 feet, no odors or staining	(Depth Interval) CEMENT SEAL: N/A NATURAL FILL: N/A BENTONITE SEAL: N/A FILTER SAND: N/A SOLID PVC RISER: N/A PVC SCREEN: N/A		
5-10	44/60		0.0 (6-10)	6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35		Grey and brown, CLAY and fine SAND, wet End of boring at 10 feet	Note: Not to scale Flush Roadbox Bentonite Seal Native Backfill Top of screen 5' Filter Sand 2" diam PVC Screen (0.01-inch slot size)		
COMMENTS: Sampled for VOC/8260 from 0-5 and 5-10 interval						GRANULAR SOILS COHESIVELESS DENSITY 0-4 Very Loose 5-9 Loose 10-29 Medium Dense 30-49 Dense 50+ Very Dense PROPORTIONS USED Trace 0-10% Little 10-20% Some 20-35% And 35-50%		LEGEND: ND = Not Detected NA = Not Applicable GS = Ground Surface	



APPENDIX E

LABORTORY REPORT

ANALYTICAL REPORT

PREPARED FOR

Attn: Stephan Landry
Atlas Technical Consultants LLC
10 State St
Suite 100
Woburn, Massachusetts 01801

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JOB DESCRIPTION

Tufts Street Improvement - Somerville, M

JOB NUMBER

620-17450-1

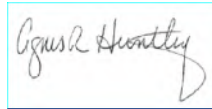
Eurofins New England

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



Authorized for release by
Agnes Huntley, Project Manager
Agnes.Huntley@et.eurofinsus.com
(401)372-3482

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Revision 1

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Definitions/Glossary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

MassDEP Analytical Protocol Certification Form

Laboratory Name: Eurofins New England

Project #: 620-17450-1

Project Location: Tufts Street Improvement - Somerville, M

RTN:

This Form provides certifications for the following data set: list Laboratory Sample ID Number(s):
620-17450-1 through 620-17450-18

Matrices: ☒ Groundwater/Surface Water ☒ Soil/Sediment ☐ Drinking Water ☐ Air ☐ Other:

CAM Protocol (check all that apply below:)

8260 VOC CAM II A ☒	7470/7471 Hg CAM III B ☒	MassDEP VPH (GC/PID/FID) CAM IV A ☐	8082 PCB CAM V A ☒	9014 Total Cyanide/PAC CAM VI A ☐	6860 Perchlorate CAM VIII B ☐
8270 SVOC CAM II B ☒	7010 Metals CAM III C ☐	MassDEP VPH (GC/MS) CAM IV C ☐	8081 Pesticides CAM V B ☐	7196 Hex Cr CAM VI B ☐	MassDEP APH CAM IX A ☐
6010 Metals CAM III A ☒	6020 Metals CAM III D ☐	MassDEP EPH CAM IV B ☐	8151 Herbicides CAM V C ☐	8330 Explosives CAM VIII A ☐	TO-15 VOC CAM IX B ☐

Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	☒ Yes ☐ No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	☒ Yes ☐ No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	☒ Yes ☐ No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	☒ Yes ☐ No
E	VPH, EPH, APH, and TO-15 only a. VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	☐ Yes ☐ No ☐ Yes ☐ No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	☒ Yes ☐ No

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	☒ Yes ☐ No ¹
----------	---	--

Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.

H	Were all QC performance standards specified in the CAM protocol(s) achieved?	☐ Yes ☒ No ¹
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	☐ Yes ☒ No ¹

¹ All negative responses must be addressed in an attached laboratory narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, is accurate and complete.

Signature: 

Position: Project Manager

Printed Name: Agnes Huntley

Date: 04/03/2024

Case Narrative

Client: Atlas Technical Consultants LLC
Project: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Job ID: 620-17450-1

Eurofins New England

Job Narrative 620-17450-1

REVISION

The report being provided is a revision of the original report sent on 3/28/2024. The report (revision 1) is being revised due to Report revised as client needed full list 8270 with low-level PAHs.

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 3/18/2024 3:25 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.4°C.

GC/MS VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC/MS Semi VOA

Method 8270MCP: The following analytes have been identified, in the reference method and/or via historical data, to be poor and/or erratic performers: Benzidine and Benzoic acid. These analytes may have a %D >50%.

Method 8270MCP: The laboratory control sample (LCS) for preparation batch 620-32927 and analytical batch 620-32951 recovered outside control limits for the following analytes: 4-Chloroaniline, Aniline, Benzidine, Benzoic acid and Pyridine. The affected target analytes recovered within acceptance limits, >10%, per MCP criteria therefore, demonstrates the analytical system had sufficient sensitivity to detect the compounds had they been present. Since the affected target compounds were not detected in the samples, the data have been reported and qualified.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC Semi VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

PCBs

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals

Method 6010MCP: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 620-33090 and analytical batch 620-33178 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 6010MCP: The sample duplicate (DUP) precision for preparation batch 620-33090 and analytical batch 620-33178 was outside control limits. Sample non-homogeneity is suspected.

Method 6010MCP: The matrix spike / matrix spike duplicate / sample duplicate (MS/MSD/DUP) precision for preparation batch 620-33090 and analytical batch 620-33178 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) precision was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins New England

Case Narrative

Client: Atlas Technical Consultants LLC
Project: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Job ID: 620-17450-1 (Continued)

Eurofins New England

General Chemistry

Method 1010A: The Pensky Martens closed cup apparatus is designed to determine the flash point of a liquid sample. The sample submitted could not be mixed well enough to obtain uniform heating. The temperature being measured was that of the material near the top of the cup. The material at the bottom of the cup could have a higher temperature. The temperature reported may not be accurate.

Method Moisture: The sample duplicate (DUP) precision for analytical batch 620-32837 was outside control limits. Sample non-homogeneity is suspected.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins New England

Detection Summary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-3 (0-5)

Lab Sample ID: 620-17450-1

No Detections.

Client Sample ID: ATC-3 (5-10)

Lab Sample ID: 620-17450-2

No Detections.

Client Sample ID: ATC-2 (0-5)

Lab Sample ID: 620-17450-3

No Detections.

Client Sample ID: ATC-2 (5-10)

Lab Sample ID: 620-17450-4

No Detections.

Client Sample ID: ATC-1 (0-5)

Lab Sample ID: 620-17450-5

No Detections.

Client Sample ID: ATC-1 (5-10)

Lab Sample ID: 620-17450-6

No Detections.

Client Sample ID: Comp (0-5)

Lab Sample ID: 620-17450-7

Analyte	Result	Qualifier	RL	Unit	Dil	Fac	D	Method	Prep Type
Acenaphthylene	28.7		17.8	ug/Kg	1	✱		8270D_LL_PAH	Total/NA
Anthracene	33.8		17.8	ug/Kg	1	✱		8270D_LL_PAH	Total/NA
Benzo[a]anthracene	148		17.8	ug/Kg	1	✱		8270D_LL_PAH	Total/NA
Benzo[a]pyrene	175		17.8	ug/Kg	1	✱		8270D_LL_PAH	Total/NA
Benzo[b]fluoranthene	179		17.8	ug/Kg	1	✱		8270D_LL_PAH	Total/NA
Benzo[g,h,i]perylene	136		17.8	ug/Kg	1	✱		8270D_LL_PAH	Total/NA
Benzo[k]fluoranthene	165		17.8	ug/Kg	1	✱		8270D_LL_PAH	Total/NA
Chrysene	156		17.8	ug/Kg	1	✱		8270D_LL_PAH	Total/NA
Dibenz(a,h)anthracene	41.0		17.8	ug/Kg	1	✱		8270D_LL_PAH	Total/NA
Fluoranthene	256		17.8	ug/Kg	1	✱		8270D_LL_PAH	Total/NA
Indeno[1,2,3-cd]pyrene	112		17.8	ug/Kg	1	✱		8270D_LL_PAH	Total/NA
Phenanthrene	102		17.8	ug/Kg	1	✱		8270D_LL_PAH	Total/NA
Pyrene	259		17.8	ug/Kg	1	✱		8270D_LL_PAH	Total/NA
Bis(2-ethylhexyl) phthalate	50.8		17.8	ug/Kg	1	✱		8270D_LL_PAH	Total/NA
TEPH (C9-C36)	90.2		15.2	mg/Kg	1	✱		8100	Total/NA
Barium	45.9		2.10	mg/Kg	2	✱		6010D	Total/NA
Chromium	13.6	F1	2.10	mg/Kg	2	✱		6010D	Total/NA
Lead	21.0		3.15	mg/Kg	2	✱		6010D	Total/NA
Flashpoint	>184		50.0	Degrees F	1			1010A	Total/NA
Total Organic Carbon	4780	F1	300	mg/Kg	1			9060	Total/NA
pH	8.4			SU	1			9045D	Soluble
Temperature	23.4			Degrees C	1			9045D	Soluble
Specific Conductance	1200		10.0	uS/cm	1			SM 2510B	Soluble

Client Sample ID: Comp (5-10)

Lab Sample ID: 620-17450-8

Analyte	Result	Qualifier	RL	Unit	Dil	Fac	D	Method	Prep Type
TEPH (C9-C36)	16.7		14.9	mg/Kg	1	✱		8100	Total/NA
Arsenic	3.60		2.88	mg/Kg	2	✱		6010D	Total/NA
Barium	39.3		1.92	mg/Kg	2	✱		6010D	Total/NA
Chromium	17.4		1.92	mg/Kg	2	✱		6010D	Total/NA
Lead	5.34		2.88	mg/Kg	2	✱		6010D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins New England

Detection Summary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: Comp (5-10) (Continued)

Lab Sample ID: 620-17450-8

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Flashpoint	>170		50.0	Degrees F	1		1010A	Total/NA
Total Organic Carbon	1620		300	mg/Kg	1		9060	Total/NA
pH	7.9			SU	1		9045D	Soluble
Temperature	23.4			Degrees C	1		9045D	Soluble
Specific Conductance	601		10.0	uS/cm	1		SM 2510B	Soluble

Client Sample ID: ATC-8 (0-5)

Lab Sample ID: 620-17450-9

No Detections.

Client Sample ID: ATC-8 (5-10)

Lab Sample ID: 620-17450-10

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	13.4		4.94	ug/Kg	1	✱	8260C	Total/NA

Client Sample ID: ATC-7 (0-5)

Lab Sample ID: 620-17450-11

No Detections.

Client Sample ID: ATC-7 (5-10)

Lab Sample ID: 620-17450-12

No Detections.

Client Sample ID: ATC-6 (0-5)

Lab Sample ID: 620-17450-13

No Detections.

Client Sample ID: ATC-6 (5-10)

Lab Sample ID: 620-17450-14

No Detections.

Client Sample ID: ATC-4 (0-5)

Lab Sample ID: 620-17450-15

No Detections.

Client Sample ID: ATC-4 (5-10)

Lab Sample ID: 620-17450-16

No Detections.

Client Sample ID: ATC-5 (0-5)

Lab Sample ID: 620-17450-17

No Detections.

Client Sample ID: ATC-5 (5-10)

Lab Sample ID: 620-17450-18

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-3 (0-5)

Lab Sample ID: 620-17450-1

Date Collected: 03/15/24 09:10

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 88.2

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Acetone	ND		98.4	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Acrylonitrile	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Benzene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Bromobenzene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Bromochloromethane	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Bromodichloromethane	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Bromoform	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Bromomethane	ND		19.7	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
2-Butanone (MEK)	ND		19.7	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
n-Butylbenzene	ND		19.7	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
sec-Butylbenzene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
tert-Butylbenzene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Carbon disulfide	ND		19.7	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Carbon tetrachloride	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Chlorobenzene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Chloroethane	ND		19.7	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Chloroform	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Chloromethane	ND		19.7	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
2-Chlorotoluene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
4-Chlorotoluene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
1,2-Dibromo-3-Chloropropane	ND		19.7	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Dibromochloromethane	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
1,2-Dibromoethane (EDB)	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Dibromomethane	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
1,2-Dichlorobenzene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
1,3-Dichlorobenzene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
1,4-Dichlorobenzene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Dichlorodifluoromethane (Freon 12)	ND		19.7	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
1,1-Dichloroethane	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
1,2-Dichloroethane	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
1,1-Dichloroethene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
cis-1,2-Dichloroethene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
trans-1,2-Dichloroethene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
1,2-Dichloropropane	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
1,3-Dichloropropane	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
2,2-Dichloropropane	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
1,1-Dichloropropene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
cis-1,3-Dichloropropene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
trans-1,3-Dichloropropene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Ethylbenzene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Hexachlorobutadiene	ND		19.7	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
2-Hexanone (MBK)	ND		19.7	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Isopropylbenzene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
4-Isopropyltoluene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Methyl tert-butyl ether	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
4-Methyl-2-pentanone (MIBK)	ND		19.7	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Methylene Chloride	ND		19.7	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Naphthalene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1

Euofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-3 (0-5)

Lab Sample ID: 620-17450-1

Date Collected: 03/15/24 09:10

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 88.2

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
Styrene	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
1,1,1,2-Tetrachloroethane	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
1,1,2,2-Tetrachloroethane	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
Tetrachloroethene	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
Toluene	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
1,2,3-Trichlorobenzene	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
1,2,4-Trichlorobenzene	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
1,3,5-Trichlorobenzene	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
1,1,1-Trichloroethane	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
1,1,2-Trichloroethane	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
Trichloroethene	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
Trichlorofluoromethane (Freon 11)	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
1,2,3-Trichloropropane	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
1,2,4-Trimethylbenzene	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
1,3,5-Trimethylbenzene	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
Vinyl chloride	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
m,p-Xylene	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
o-Xylene	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
Tetrahydrofuran	ND		19.7	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
Ethyl ether	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
Tert-amyl methyl ether	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
Ethyl tert-butyl ether	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
di-Isopropyl ether	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
tert-Butanol	ND		197	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
1,4-Dioxane	ND		197	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
trans-1,4-Dichloro-2-butene	ND		49.2	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
Ethanol	ND		1970	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
1,3-Dichloropropene, Total	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
Xylenes, Total	ND		29.5	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	03/26/24 07:37	03/26/24 12:08	1
Toluene-d8 (Surr)	97		70 - 130	03/26/24 07:37	03/26/24 12:08	1
1,2-Dichloroethane-d4 (Surr)	99		70 - 130	03/26/24 07:37	03/26/24 12:08	1
Dibromofluoromethane (Surr)	97		70 - 130	03/26/24 07:37	03/26/24 12:08	1

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-3 (5-10)

Lab Sample ID: 620-17450-2

Date Collected: 03/15/24 09:30

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 87.3

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Acetone	ND		51.6	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Acrylonitrile	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Benzene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Bromobenzene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Bromochloromethane	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Bromodichloromethane	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Bromoform	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Bromomethane	ND		10.3	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
2-Butanone (MEK)	ND		10.3	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
n-Butylbenzene	ND		10.3	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
sec-Butylbenzene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
tert-Butylbenzene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Carbon disulfide	ND		10.3	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Carbon tetrachloride	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Chlorobenzene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Chloroethane	ND		10.3	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Chloroform	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Chloromethane	ND		10.3	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
2-Chlorotoluene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
4-Chlorotoluene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
1,2-Dibromo-3-Chloropropane	ND		10.3	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Dibromochloromethane	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
1,2-Dibromoethane (EDB)	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Dibromomethane	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
1,2-Dichlorobenzene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
1,3-Dichlorobenzene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
1,4-Dichlorobenzene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Dichlorodifluoromethane (Freon 12)	ND		10.3	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
1,1-Dichloroethane	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
1,2-Dichloroethane	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
1,1-Dichloroethene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
cis-1,2-Dichloroethene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
trans-1,2-Dichloroethene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
1,2-Dichloropropane	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
1,3-Dichloropropane	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
2,2-Dichloropropane	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
1,1-Dichloropropene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
cis-1,3-Dichloropropene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
trans-1,3-Dichloropropene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Ethylbenzene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Hexachlorobutadiene	ND		10.3	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
2-Hexanone (MBK)	ND		10.3	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Isopropylbenzene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
4-Isopropyltoluene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Methyl tert-butyl ether	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
4-Methyl-2-pentanone (MIBK)	ND		10.3	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Methylene Chloride	ND		10.3	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Naphthalene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1

Euofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-3 (5-10)

Lab Sample ID: 620-17450-2

Date Collected: 03/15/24 09:30

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 87.3

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
Styrene	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
1,1,1,2-Tetrachloroethane	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
1,1,2,2-Tetrachloroethane	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
Tetrachloroethene	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
Toluene	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
1,2,3-Trichlorobenzene	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
1,2,4-Trichlorobenzene	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
1,3,5-Trichlorobenzene	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
1,1,1-Trichloroethane	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
1,1,2-Trichloroethane	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
Trichloroethene	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
Trichlorofluoromethane (Freon 11)	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
1,2,3-Trichloropropane	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
1,2,4-Trimethylbenzene	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
1,3,5-Trimethylbenzene	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
Vinyl chloride	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
m,p-Xylene	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
o-Xylene	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
Tetrahydrofuran	ND		10.3	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
Ethyl ether	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
Tert-amyl methyl ether	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
Ethyl tert-butyl ether	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
di-Isopropyl ether	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
tert-Butanol	ND		103	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
1,4-Dioxane	ND		103	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
trans-1,4-Dichloro-2-butene	ND		25.8	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
Ethanol	ND		1030	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
1,3-Dichloropropene, Total	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
Xylenes, Total	ND		15.5	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	03/26/24 07:37	03/26/24 12:33	1
Toluene-d8 (Surr)	98		70 - 130	03/26/24 07:37	03/26/24 12:33	1
1,2-Dichloroethane-d4 (Surr)	100		70 - 130	03/26/24 07:37	03/26/24 12:33	1
Dibromofluoromethane (Surr)	100		70 - 130	03/26/24 07:37	03/26/24 12:33	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-2 (0-5)

Lab Sample ID: 620-17450-3

Date Collected: 03/15/24 10:15

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 90.6

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Acetone	ND		54.6	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Acrylonitrile	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Benzene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Bromobenzene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Bromochloromethane	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Bromodichloromethane	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Bromoform	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Bromomethane	ND		10.9	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
2-Butanone (MEK)	ND		10.9	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
n-Butylbenzene	ND		10.9	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
sec-Butylbenzene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
tert-Butylbenzene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Carbon disulfide	ND		10.9	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Carbon tetrachloride	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Chlorobenzene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Chloroethane	ND		10.9	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Chloroform	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Chloromethane	ND		10.9	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
2-Chlorotoluene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
4-Chlorotoluene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
1,2-Dibromo-3-Chloropropane	ND		10.9	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Dibromochloromethane	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
1,2-Dibromoethane (EDB)	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Dibromomethane	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
1,2-Dichlorobenzene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
1,3-Dichlorobenzene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
1,4-Dichlorobenzene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Dichlorodifluoromethane (Freon 12)	ND		10.9	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
1,1-Dichloroethane	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
1,2-Dichloroethane	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
1,1-Dichloroethene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
cis-1,2-Dichloroethene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
trans-1,2-Dichloroethene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
1,2-Dichloropropane	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
1,3-Dichloropropane	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
2,2-Dichloropropane	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
1,1-Dichloropropene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
cis-1,3-Dichloropropene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
trans-1,3-Dichloropropene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Ethylbenzene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Hexachlorobutadiene	ND		10.9	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
2-Hexanone (MBK)	ND		10.9	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Isopropylbenzene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
4-Isopropyltoluene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Methyl tert-butyl ether	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
4-Methyl-2-pentanone (MIBK)	ND		10.9	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Methylene Chloride	ND		10.9	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Naphthalene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1

Euofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-2 (0-5)

Lab Sample ID: 620-17450-3

Date Collected: 03/15/24 10:15

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 90.6

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
Styrene	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
1,1,1,2-Tetrachloroethane	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
1,1,2,2-Tetrachloroethane	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
Tetrachloroethene	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
Toluene	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
1,2,3-Trichlorobenzene	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
1,2,4-Trichlorobenzene	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
1,3,5-Trichlorobenzene	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
1,1,1-Trichloroethane	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
1,1,2-Trichloroethane	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
Trichloroethene	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
Trichlorofluoromethane (Freon 11)	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
1,2,3-Trichloropropane	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
1,2,4-Trimethylbenzene	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
1,3,5-Trimethylbenzene	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
Vinyl chloride	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
m,p-Xylene	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
o-Xylene	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
Tetrahydrofuran	ND		10.9	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
Ethyl ether	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
Tert-amyl methyl ether	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
Ethyl tert-butyl ether	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
di-Isopropyl ether	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
tert-Butanol	ND		109	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
1,4-Dioxane	ND		109	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
trans-1,4-Dichloro-2-butene	ND		27.3	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
Ethanol	ND		1090	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
1,3-Dichloropropene, Total	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
Xylenes, Total	ND		16.4	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	03/26/24 07:37	03/26/24 12:58	1
Toluene-d8 (Surr)	97		70 - 130	03/26/24 07:37	03/26/24 12:58	1
1,2-Dichloroethane-d4 (Surr)	100		70 - 130	03/26/24 07:37	03/26/24 12:58	1
Dibromofluoromethane (Surr)	100		70 - 130	03/26/24 07:37	03/26/24 12:58	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-2 (5-10)

Lab Sample ID: 620-17450-4

Date Collected: 03/15/24 11:00

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 77.8

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Acetone	ND		64.1	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Acrylonitrile	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Benzene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Bromobenzene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Bromochloromethane	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Bromodichloromethane	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Bromoform	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Bromomethane	ND		12.8	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
2-Butanone (MEK)	ND		12.8	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
n-Butylbenzene	ND		12.8	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
sec-Butylbenzene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
tert-Butylbenzene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Carbon disulfide	ND		12.8	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Carbon tetrachloride	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Chlorobenzene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Chloroethane	ND		12.8	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Chloroform	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Chloromethane	ND		12.8	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
2-Chlorotoluene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
4-Chlorotoluene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
1,2-Dibromo-3-Chloropropane	ND		12.8	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Dibromochloromethane	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
1,2-Dibromoethane (EDB)	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Dibromomethane	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
1,2-Dichlorobenzene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
1,3-Dichlorobenzene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
1,4-Dichlorobenzene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Dichlorodifluoromethane (Freon 12)	ND		12.8	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
1,1-Dichloroethane	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
1,2-Dichloroethane	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
1,1-Dichloroethene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
cis-1,2-Dichloroethene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
trans-1,2-Dichloroethene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
1,2-Dichloropropane	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
1,3-Dichloropropane	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
2,2-Dichloropropane	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
1,1-Dichloropropene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
cis-1,3-Dichloropropene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
trans-1,3-Dichloropropene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Ethylbenzene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Hexachlorobutadiene	ND		12.8	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
2-Hexanone (MBK)	ND		12.8	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Isopropylbenzene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
4-Isopropyltoluene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Methyl tert-butyl ether	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
4-Methyl-2-pentanone (MIBK)	ND		12.8	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Methylene Chloride	ND		12.8	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Naphthalene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1

Euofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-2 (5-10)

Lab Sample ID: 620-17450-4

Date Collected: 03/15/24 11:00

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 77.8

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
Styrene	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
1,1,1,2-Tetrachloroethane	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
1,1,2,2-Tetrachloroethane	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
Tetrachloroethene	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
Toluene	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
1,2,3-Trichlorobenzene	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
1,2,4-Trichlorobenzene	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
1,3,5-Trichlorobenzene	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
1,1,1-Trichloroethane	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
1,1,2-Trichloroethane	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
Trichloroethene	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
Trichlorofluoromethane (Freon 11)	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
1,2,3-Trichloropropane	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
1,2,4-Trimethylbenzene	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
1,3,5-Trimethylbenzene	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
Vinyl chloride	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
m,p-Xylene	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
o-Xylene	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
Tetrahydrofuran	ND		12.8	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
Ethyl ether	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
Tert-amyl methyl ether	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
Ethyl tert-butyl ether	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
di-Isopropyl ether	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
tert-Butanol	ND		128	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
1,4-Dioxane	ND		128	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
trans-1,4-Dichloro-2-butene	ND		32.1	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
Ethanol	ND		1280	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
1,3-Dichloropropene, Total	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
Xylenes, Total	ND		19.2	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	03/26/24 07:37	03/26/24 13:23	1
Toluene-d8 (Surr)	99		70 - 130	03/26/24 07:37	03/26/24 13:23	1
1,2-Dichloroethane-d4 (Surr)	113		70 - 130	03/26/24 07:37	03/26/24 13:23	1
Dibromofluoromethane (Surr)	105		70 - 130	03/26/24 07:37	03/26/24 13:23	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-1 (0-5)

Lab Sample ID: 620-17450-5

Date Collected: 03/15/24 11:20

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 88.8

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Acetone	ND		46.9	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Acrylonitrile	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Benzene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Bromobenzene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Bromochloromethane	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Bromodichloromethane	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Bromoform	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Bromomethane	ND		9.38	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
2-Butanone (MEK)	ND		9.38	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
n-Butylbenzene	ND		9.38	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
sec-Butylbenzene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
tert-Butylbenzene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Carbon disulfide	ND		9.38	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Carbon tetrachloride	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Chlorobenzene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Chloroethane	ND		9.38	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Chloroform	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Chloromethane	ND		9.38	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
2-Chlorotoluene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
4-Chlorotoluene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
1,2-Dibromo-3-Chloropropane	ND		9.38	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Dibromochloromethane	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
1,2-Dibromoethane (EDB)	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Dibromomethane	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
1,2-Dichlorobenzene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
1,3-Dichlorobenzene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
1,4-Dichlorobenzene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Dichlorodifluoromethane (Freon 12)	ND		9.38	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
1,1-Dichloroethane	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
1,2-Dichloroethane	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
1,1-Dichloroethene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
cis-1,2-Dichloroethene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
trans-1,2-Dichloroethene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
1,2-Dichloropropane	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
1,3-Dichloropropane	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
2,2-Dichloropropane	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
1,1-Dichloropropene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
cis-1,3-Dichloropropene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
trans-1,3-Dichloropropene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Ethylbenzene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Hexachlorobutadiene	ND		9.38	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
2-Hexanone (MBK)	ND		9.38	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Isopropylbenzene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
4-Isopropyltoluene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Methyl tert-butyl ether	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
4-Methyl-2-pentanone (MIBK)	ND		9.38	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Methylene Chloride	ND		9.38	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Naphthalene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1

Euofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-1 (0-5)

Lab Sample ID: 620-17450-5

Date Collected: 03/15/24 11:20

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 88.8

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
Styrene	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
1,1,1,2-Tetrachloroethane	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
1,1,2,2-Tetrachloroethane	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
Tetrachloroethene	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
Toluene	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
1,2,3-Trichlorobenzene	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
1,2,4-Trichlorobenzene	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
1,3,5-Trichlorobenzene	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
1,1,1-Trichloroethane	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
1,1,2-Trichloroethane	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
Trichloroethene	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
Trichlorofluoromethane (Freon 11)	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
1,2,3-Trichloropropane	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
1,2,4-Trimethylbenzene	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
1,3,5-Trimethylbenzene	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
Vinyl chloride	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
m,p-Xylene	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
o-Xylene	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
Tetrahydrofuran	ND		9.38	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
Ethyl ether	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
Tert-amyl methyl ether	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
Ethyl tert-butyl ether	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
di-Isopropyl ether	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
tert-Butanol	ND		93.8	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
1,4-Dioxane	ND		93.8	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
trans-1,4-Dichloro-2-butene	ND		23.5	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
Ethanol	ND		938	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
1,3-Dichloropropene, Total	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
Xylenes, Total	ND		14.1	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	03/26/24 07:37	03/26/24 13:49	1
Toluene-d8 (Surr)	99		70 - 130	03/26/24 07:37	03/26/24 13:49	1
1,2-Dichloroethane-d4 (Surr)	101		70 - 130	03/26/24 07:37	03/26/24 13:49	1
Dibromofluoromethane (Surr)	100		70 - 130	03/26/24 07:37	03/26/24 13:49	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-1 (5-10)

Lab Sample ID: 620-17450-6

Date Collected: 03/15/24 11:30

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 91.4

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Acetone	ND		53.2	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Acrylonitrile	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Benzene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Bromobenzene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Bromochloromethane	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Bromodichloromethane	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Bromoform	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Bromomethane	ND		10.6	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
2-Butanone (MEK)	ND		10.6	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
n-Butylbenzene	ND		10.6	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
sec-Butylbenzene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
tert-Butylbenzene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Carbon disulfide	ND		10.6	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Carbon tetrachloride	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Chlorobenzene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Chloroethane	ND		10.6	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Chloroform	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Chloromethane	ND		10.6	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
2-Chlorotoluene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
4-Chlorotoluene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
1,2-Dibromo-3-Chloropropane	ND		10.6	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Dibromochloromethane	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
1,2-Dibromoethane (EDB)	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Dibromomethane	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
1,2-Dichlorobenzene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
1,3-Dichlorobenzene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
1,4-Dichlorobenzene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Dichlorodifluoromethane (Freon 12)	ND		10.6	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
1,1-Dichloroethane	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
1,2-Dichloroethane	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
1,1-Dichloroethene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
cis-1,2-Dichloroethene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
trans-1,2-Dichloroethene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
1,2-Dichloropropane	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
1,3-Dichloropropane	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
2,2-Dichloropropane	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
1,1-Dichloropropene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
cis-1,3-Dichloropropene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
trans-1,3-Dichloropropene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Ethylbenzene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Hexachlorobutadiene	ND		10.6	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
2-Hexanone (MBK)	ND		10.6	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Isopropylbenzene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
4-Isopropyltoluene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Methyl tert-butyl ether	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
4-Methyl-2-pentanone (MIBK)	ND		10.6	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Methylene Chloride	ND		10.6	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Naphthalene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1

Euofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-1 (5-10)

Lab Sample ID: 620-17450-6

Date Collected: 03/15/24 11:30

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 91.4

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
Styrene	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
1,1,1,2-Tetrachloroethane	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
1,1,2,2-Tetrachloroethane	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
Tetrachloroethene	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
Toluene	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
1,2,3-Trichlorobenzene	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
1,2,4-Trichlorobenzene	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
1,3,5-Trichlorobenzene	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
1,1,1-Trichloroethane	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
1,1,2-Trichloroethane	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
Trichloroethene	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
Trichlorofluoromethane (Freon 11)	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
1,2,3-Trichloropropane	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
1,2,4-Trimethylbenzene	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
1,3,5-Trimethylbenzene	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
Vinyl chloride	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
m,p-Xylene	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
o-Xylene	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
Tetrahydrofuran	ND		10.6	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
Ethyl ether	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
Tert-amyl methyl ether	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
Ethyl tert-butyl ether	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
di-Isopropyl ether	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
tert-Butanol	ND		106	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
1,4-Dioxane	ND		106	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
trans-1,4-Dichloro-2-butene	ND		26.6	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
Ethanol	ND		1060	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
1,3-Dichloropropene, Total	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
Xylenes, Total	ND		16.0	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	03/26/24 07:37	03/26/24 14:14	1
Toluene-d8 (Surr)	99		70 - 130	03/26/24 07:37	03/26/24 14:14	1
1,2-Dichloroethane-d4 (Surr)	101		70 - 130	03/26/24 07:37	03/26/24 14:14	1
Dibromofluoromethane (Surr)	101		70 - 130	03/26/24 07:37	03/26/24 14:14	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: Comp (0-5)

Lab Sample ID: 620-17450-7

Date Collected: 03/15/24 12:00

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 87.7

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Acenaphthylene	28.7		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
1-Methylnaphthalene	ND		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Anthracene	33.8		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Benzo[a]anthracene	148		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Benzo[a]pyrene	175		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Benzo[b]fluoranthene	179		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Benzo[g,h,i]perylene	136		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Benzo[k]fluoranthene	165		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Chrysene	156		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Dibenz(a,h)anthracene	41.0		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Fluoranthene	256		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Fluorene	ND		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Indeno[1,2,3-cd]pyrene	112		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
2-Methylnaphthalene	ND		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Naphthalene	ND		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Phenanthrene	102		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Pyrene	259		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Bis(2-ethylhexyl) phthalate	50.8		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	43		30 - 130	03/21/24 08:36	03/21/24 15:49	1
Terphenyl-d14 (Surr)	76		30 - 130	03/21/24 08:36	03/21/24 15:49	1
2-Fluorobiphenyl (Surr)	51		30 - 130	03/21/24 08:36	03/21/24 15:49	1

Method: MA DEP 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
1,2,4-Trichlorobenzene	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
1,2-Dichlorobenzene	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
1,3-Dichlorobenzene	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
1,4-Dichlorobenzene	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
2,4,5-Trichlorophenol	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
2,4,6-Trichlorophenol	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
2,4-Dichlorophenol	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
2,4-Dimethylphenol	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
2,4-Dinitrophenol	ND		733	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
2,4-Dinitrotoluene	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
2,6-Dinitrotoluene	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
2-Chloronaphthalene	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
2-Chlorophenol	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
2-Methylphenol	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
2-Nitroaniline	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
2-Nitrophenol	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
3 & 4 Methylphenol	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
3,3'-Dichlorobenzidine	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
3-Nitroaniline	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
4,6-Dinitro-2-methylphenol	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
4-Bromophenyl phenyl ether	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
4-Chloro-3-methylphenol	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: Comp (0-5)

Lab Sample ID: 620-17450-7

Date Collected: 03/15/24 12:00

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 87.7

Method: MA DEP 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chloroaniline	ND	*-	185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
4-Chlorophenyl phenyl ether	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
4-Nitroaniline	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
4-Nitrophenol	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Acetophenone	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Aniline	ND	*-	366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Azobenzene/Diphenyldiazene	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Benzidine	ND	*-	733	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Benzoic acid	ND	*-	740	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Benzyl alcohol	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Bis(2-chloroethoxy)methane	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Bis(2-chloroethyl)ether	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
bis (2-chloroisopropyl) ether	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Bis(2-ethylhexyl) phthalate	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Butyl benzyl phthalate	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Carbazole	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Dibenzofuran	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Diethyl phthalate	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Dimethyl phthalate	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Di-n-butyl phthalate	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Di-n-octyl phthalate	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Hexachlorobenzene	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Hexachlorobutadiene	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Hexachlorocyclopentadiene	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Hexachloroethane	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Isophorone	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Nitrobenzene	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
N-Nitrosodimethylamine	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
N-Nitrosodi-n-propylamine	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
N-Nitrosodiphenylamine	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Pentachloronitrobenzene	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Pentachlorophenol	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Phenol	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Pyridine	ND	*-	366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	50		30 - 130	03/21/24 08:36	03/21/24 15:49	1
2-Fluorophenol (Surr)	50		15 - 110	03/21/24 08:36	03/21/24 15:49	1
Nitrobenzene-d5 (Surr)	39		30 - 130	03/21/24 08:36	03/21/24 15:49	1
Phenol-d5 (Surr)	54		15 - 110	03/21/24 08:36	03/21/24 15:49	1
2,4,6-Tribromophenol (Surr)	63		15 - 110	03/21/24 08:36	03/21/24 15:49	1
Terphenyl-d14 (Surr)	76		30 - 130	03/21/24 08:36	03/21/24 15:49	1

Method: MA DEP 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		21.9	ug/Kg	☆	03/19/24 14:48	03/21/24 23:56	1
PCB-1221	ND		21.9	ug/Kg	☆	03/19/24 14:48	03/21/24 23:56	1
PCB-1232	ND		21.9	ug/Kg	☆	03/19/24 14:48	03/21/24 23:56	1
PCB-1242	ND		21.9	ug/Kg	☆	03/19/24 14:48	03/21/24 23:56	1
PCB-1248	ND		21.9	ug/Kg	☆	03/19/24 14:48	03/21/24 23:56	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: Comp (0-5)

Lab Sample ID: 620-17450-7

Date Collected: 03/15/24 12:00

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 87.7

Method: MA DEP 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1254	ND		21.9	ug/Kg	☆	03/19/24 14:48	03/21/24 23:56	1
PCB-1262	ND		21.9	ug/Kg	☆	03/19/24 14:48	03/21/24 23:56	1
PCB-1260	ND		21.9	ug/Kg	☆	03/19/24 14:48	03/21/24 23:56	1
PCB-1268	ND		21.9	ug/Kg	☆	03/19/24 14:48	03/21/24 23:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	73		30 - 150			03/19/24 14:48	03/21/24 23:56	1
DCB Decachlorobiphenyl (Surr)	88		30 - 150			03/19/24 14:48	03/21/24 23:56	1

Method: SW846 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TEPH (C9-C36)	90.2		15.2	mg/Kg	☆	03/19/24 17:07	03/21/24 15:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctadecane (Surr)	100		40 - 140			03/19/24 17:07	03/21/24 15:35	1
o-Terphenyl (Surr)	72		40 - 140			03/19/24 17:07	03/21/24 15:35	1

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND	F1	3.15	mg/Kg	☆	03/26/24 08:24	03/27/24 14:54	2
Barium	45.9		2.10	mg/Kg	☆	03/26/24 08:24	03/27/24 14:54	2
Cadmium	ND		1.05	mg/Kg	☆	03/26/24 08:24	03/27/24 14:54	2
Chromium	13.6	F1	2.10	mg/Kg	☆	03/26/24 08:24	03/27/24 14:54	2
Lead	21.0		3.15	mg/Kg	☆	03/26/24 08:24	03/27/24 14:54	2
Selenium	ND	F1	3.15	mg/Kg	☆	03/26/24 08:24	03/27/24 14:54	2
Silver	ND	F1	3.15	mg/Kg	☆	03/26/24 08:24	03/27/24 14:54	2

Method: SW846 6010D - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0150	mg/L		03/26/24 15:40	03/27/24 13:47	1

Method: SW846 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0530	mg/Kg	☆	03/19/24 11:28	03/19/24 15:44	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Flashpoint (SW846 1010A)	>184		50.0	Degrees F			03/21/24 10:01	1
Cyanide, Reactive (SW846 9012)	ND		57.7	mg/Kg		03/25/24 08:25	03/25/24 17:06	1
Sulfide, Reactive (SW846 9034)	ND		154	mg/Kg		03/25/24 08:25	03/25/24 12:45	1
Total Organic Carbon (SW846 9060)	4780	F1	300	mg/Kg			03/21/24 13:08	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SW846 9045D)	8.4			SU			03/28/24 11:32	1
Temperature (SW846 9045D)	23.4			Degrees C			03/28/24 11:32	1
Specific Conductance (SM 2510B)	1200		10.0	uS/cm			03/28/24 11:04	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: Comp (5-10)

Lab Sample ID: 620-17450-8

Date Collected: 03/15/24 12:15

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 87.4

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Acenaphthylene	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
1-Methylnaphthalene	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Anthracene	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Benzo[a]anthracene	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Benzo[a]pyrene	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Benzo[b]fluoranthene	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Benzo[g,h,i]perylene	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Benzo[k]fluoranthene	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Chrysene	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Dibenz(a,h)anthracene	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Fluoranthene	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Fluorene	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Indeno[1,2,3-cd]pyrene	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
2-Methylnaphthalene	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Naphthalene	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Phenanthrene	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Pyrene	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Bis(2-ethylhexyl) phthalate	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	46		30 - 130	03/21/24 08:36	03/21/24 16:14	1
Terphenyl-d14 (Surr)	65		30 - 130	03/21/24 08:36	03/21/24 16:14	1
2-Fluorobiphenyl (Surr)	41		30 - 130	03/21/24 08:36	03/21/24 16:14	1

Method: MA DEP 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
1,2,4-Trichlorobenzene	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
1,2-Dichlorobenzene	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
1,3-Dichlorobenzene	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
1,4-Dichlorobenzene	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
2,4,5-Trichlorophenol	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
2,4,6-Trichlorophenol	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
2,4-Dichlorophenol	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
2,4-Dimethylphenol	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
2,4-Dinitrophenol	ND		737	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
2,4-Dinitrotoluene	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
2,6-Dinitrotoluene	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
2-Chloronaphthalene	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
2-Chlorophenol	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
2-Methylphenol	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
2-Nitroaniline	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
2-Nitrophenol	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
3 & 4 Methylphenol	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
3,3'-Dichlorobenzidine	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
3-Nitroaniline	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
4,6-Dinitro-2-methylphenol	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
4-Bromophenyl phenyl ether	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
4-Chloro-3-methylphenol	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: Comp (5-10)

Lab Sample ID: 620-17450-8

Date Collected: 03/15/24 12:15

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 87.4

Method: MA DEP 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chloroaniline	ND	*-	186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
4-Chlorophenyl phenyl ether	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
4-Nitroaniline	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
4-Nitrophenol	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Acetophenone	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Aniline	ND	*-	368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Azobenzene/Diphenyldiazene	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Benzidine	ND	*-	737	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Benzoic acid	ND	*-	744	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Benzyl alcohol	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Bis(2-chloroethoxy)methane	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Bis(2-chloroethyl)ether	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
bis (2-chloroisopropyl) ether	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Bis(2-ethylhexyl) phthalate	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Butyl benzyl phthalate	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Carbazole	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Dibenzofuran	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Diethyl phthalate	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Dimethyl phthalate	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Di-n-butyl phthalate	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Di-n-octyl phthalate	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Hexachlorobenzene	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Hexachlorobutadiene	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Hexachlorocyclopentadiene	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Hexachloroethane	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Isophorone	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Nitrobenzene	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
N-Nitrosodimethylamine	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
N-Nitrosodi-n-propylamine	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
N-Nitrosodiphenylamine	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Pentachloronitrobenzene	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Pentachlorophenol	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Phenol	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Pyridine	ND	*-	368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	41		30 - 130	03/21/24 08:36	03/21/24 16:14	1
2-Fluorophenol (Surr)	45		15 - 110	03/21/24 08:36	03/21/24 16:14	1
Nitrobenzene-d5 (Surr)	42		30 - 130	03/21/24 08:36	03/21/24 16:14	1
Phenol-d5 (Surr)	45		15 - 110	03/21/24 08:36	03/21/24 16:14	1
2,4,6-Tribromophenol (Surr)	48		15 - 110	03/21/24 08:36	03/21/24 16:14	1
Terphenyl-d14 (Surr)	65		30 - 130	03/21/24 08:36	03/21/24 16:14	1

Method: MA DEP 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		22.1	ug/Kg	☆	03/19/24 14:48	03/22/24 00:14	1
PCB-1221	ND		22.1	ug/Kg	☆	03/19/24 14:48	03/22/24 00:14	1
PCB-1232	ND		22.1	ug/Kg	☆	03/19/24 14:48	03/22/24 00:14	1
PCB-1242	ND		22.1	ug/Kg	☆	03/19/24 14:48	03/22/24 00:14	1
PCB-1248	ND		22.1	ug/Kg	☆	03/19/24 14:48	03/22/24 00:14	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: Comp (5-10)

Date Collected: 03/15/24 12:15

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-8

Matrix: Solid

Percent Solids: 87.4

Method: MA DEP 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1254	ND		22.1	ug/Kg	☆	03/19/24 14:48	03/22/24 00:14	1
PCB-1262	ND		22.1	ug/Kg	☆	03/19/24 14:48	03/22/24 00:14	1
PCB-1260	ND		22.1	ug/Kg	☆	03/19/24 14:48	03/22/24 00:14	1
PCB-1268	ND		22.1	ug/Kg	☆	03/19/24 14:48	03/22/24 00:14	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	79		30 - 150			03/19/24 14:48	03/22/24 00:14	1
DCB Decachlorobiphenyl (Surr)	66		30 - 150			03/19/24 14:48	03/22/24 00:14	1

Method: SW846 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TEPH (C9-C36)	16.7		14.9	mg/Kg	☆	03/19/24 17:07	03/21/24 15:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctadecane (Surr)	84		40 - 140			03/19/24 17:07	03/21/24 15:57	1
o-Terphenyl (Surr)	73		40 - 140			03/19/24 17:07	03/21/24 15:57	1

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	3.60		2.88	mg/Kg	☆	03/26/24 08:24	03/27/24 15:18	2
Barium	39.3		1.92	mg/Kg	☆	03/26/24 08:24	03/27/24 15:18	2
Cadmium	ND		0.961	mg/Kg	☆	03/26/24 08:24	03/27/24 15:18	2
Chromium	17.4		1.92	mg/Kg	☆	03/26/24 08:24	03/27/24 15:18	2
Lead	5.34		2.88	mg/Kg	☆	03/26/24 08:24	03/27/24 15:18	2
Selenium	ND		2.88	mg/Kg	☆	03/26/24 08:24	03/27/24 15:18	2
Silver	ND		2.88	mg/Kg	☆	03/26/24 08:24	03/27/24 15:18	2

Method: SW846 6010D - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0150	mg/L		03/26/24 15:40	03/27/24 13:23	1

Method: SW846 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0512	mg/Kg	☆	03/19/24 11:28	03/19/24 15:46	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Flashpoint (SW846 1010A)	>170		50.0	Degrees F			03/21/24 10:01	1
Cyanide, Reactive (SW846 9012)	ND		59.9	mg/Kg		03/25/24 08:25	03/25/24 17:07	1
Sulfide, Reactive (SW846 9034)	ND		160	mg/Kg		03/25/24 08:25	03/25/24 12:45	1
Total Organic Carbon (SW846 9060)	1620		300	mg/Kg			03/21/24 13:29	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SW846 9045D)	7.9			SU			03/28/24 11:32	1
Temperature (SW846 9045D)	23.4			Degrees C			03/28/24 11:32	1
Specific Conductance (SM 2510B)	601		10.0	uS/cm			03/28/24 11:04	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-8 (0-5)

Lab Sample ID: 620-17450-9

Date Collected: 03/14/24 10:00

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 88.0

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Acetone	ND		61.9	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Acrylonitrile	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Benzene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Bromobenzene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Bromochloromethane	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Bromodichloromethane	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Bromoform	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Bromomethane	ND		12.4	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
2-Butanone (MEK)	ND		12.4	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
n-Butylbenzene	ND		12.4	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
sec-Butylbenzene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
tert-Butylbenzene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Carbon disulfide	ND		12.4	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Carbon tetrachloride	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Chlorobenzene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Chloroethane	ND		12.4	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Chloroform	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Chloromethane	ND		12.4	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
2-Chlorotoluene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
4-Chlorotoluene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
1,2-Dibromo-3-Chloropropane	ND		12.4	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Dibromochloromethane	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
1,2-Dibromoethane (EDB)	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Dibromomethane	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
1,2-Dichlorobenzene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
1,3-Dichlorobenzene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
1,4-Dichlorobenzene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Dichlorodifluoromethane (Freon 12)	ND		12.4	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
1,1-Dichloroethane	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
1,2-Dichloroethane	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
1,1-Dichloroethene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
cis-1,2-Dichloroethene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
trans-1,2-Dichloroethene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
1,2-Dichloropropane	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
1,3-Dichloropropane	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
2,2-Dichloropropane	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
1,1-Dichloropropene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
cis-1,3-Dichloropropene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
trans-1,3-Dichloropropene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Ethylbenzene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Hexachlorobutadiene	ND		12.4	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
2-Hexanone (MBK)	ND		12.4	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Isopropylbenzene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
4-Isopropyltoluene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Methyl tert-butyl ether	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
4-Methyl-2-pentanone (MIBK)	ND		12.4	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Methylene Chloride	ND		12.4	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Naphthalene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1

Euofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-8 (0-5)

Lab Sample ID: 620-17450-9

Date Collected: 03/14/24 10:00

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 88.0

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
Styrene	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
1,1,1,2-Tetrachloroethane	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
1,1,2,2-Tetrachloroethane	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
Tetrachloroethene	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
Toluene	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
1,2,3-Trichlorobenzene	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
1,2,4-Trichlorobenzene	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
1,3,5-Trichlorobenzene	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
1,1,1-Trichloroethane	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
1,1,2-Trichloroethane	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
Trichloroethene	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
Trichlorofluoromethane (Freon 11)	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
1,2,3-Trichloropropane	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
1,2,4-Trimethylbenzene	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
1,3,5-Trimethylbenzene	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
Vinyl chloride	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
m,p-Xylene	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
o-Xylene	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
Tetrahydrofuran	ND		12.4	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
Ethyl ether	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
Tert-amyl methyl ether	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
Ethyl tert-butyl ether	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
di-Isopropyl ether	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
tert-Butanol	ND		124	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
1,4-Dioxane	ND		124	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
trans-1,4-Dichloro-2-butene	ND		31.0	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
Ethanol	ND		1240	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
1,3-Dichloropropene, Total	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
Xylenes, Total	ND		18.6	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	03/26/24 07:37	03/26/24 14:40	1
Toluene-d8 (Surr)	98		70 - 130	03/26/24 07:37	03/26/24 14:40	1
1,2-Dichloroethane-d4 (Surr)	101		70 - 130	03/26/24 07:37	03/26/24 14:40	1
Dibromofluoromethane (Surr)	100		70 - 130	03/26/24 07:37	03/26/24 14:40	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-8 (5-10)

Lab Sample ID: 620-17450-10

Date Collected: 03/14/24 11:50

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 77.8

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Acetone	ND		49.4	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Acrylonitrile	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Benzene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Bromobenzene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Bromochloromethane	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Bromodichloromethane	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Bromoform	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Bromomethane	ND		9.88	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
2-Butanone (MEK)	ND		9.88	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
n-Butylbenzene	ND		9.88	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
sec-Butylbenzene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
tert-Butylbenzene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Carbon disulfide	ND		9.88	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Carbon tetrachloride	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Chlorobenzene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Chloroethane	ND		9.88	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Chloroform	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Chloromethane	ND		9.88	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
2-Chlorotoluene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
4-Chlorotoluene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
1,2-Dibromo-3-Chloropropane	ND		9.88	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Dibromochloromethane	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
1,2-Dibromoethane (EDB)	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Dibromomethane	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
1,2-Dichlorobenzene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
1,3-Dichlorobenzene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
1,4-Dichlorobenzene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Dichlorodifluoromethane (Freon 12)	ND		9.88	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
1,1-Dichloroethane	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
1,2-Dichloroethane	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
1,1-Dichloroethene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
cis-1,2-Dichloroethene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
trans-1,2-Dichloroethene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
1,2-Dichloropropane	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
1,3-Dichloropropane	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
2,2-Dichloropropane	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
1,1-Dichloropropene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
cis-1,3-Dichloropropene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
trans-1,3-Dichloropropene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Ethylbenzene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Hexachlorobutadiene	ND		9.88	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
2-Hexanone (MBK)	ND		9.88	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Isopropylbenzene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
4-Isopropyltoluene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Methyl tert-butyl ether	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
4-Methyl-2-pentanone (MIBK)	ND		9.88	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Methylene Chloride	ND		9.88	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Naphthalene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1

Euofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-8 (5-10)

Lab Sample ID: 620-17450-10

Date Collected: 03/14/24 11:50

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 77.8

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
Styrene	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
1,1,1,2-Tetrachloroethane	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
1,1,2,2-Tetrachloroethane	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
Tetrachloroethene	13.4		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
Toluene	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
1,2,3-Trichlorobenzene	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
1,2,4-Trichlorobenzene	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
1,3,5-Trichlorobenzene	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
1,1,1-Trichloroethane	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
1,1,2-Trichloroethane	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
Trichloroethene	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
Trichlorofluoromethane (Freon 11)	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
1,2,3-Trichloropropane	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
1,2,4-Trimethylbenzene	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
1,3,5-Trimethylbenzene	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
Vinyl chloride	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
m,p-Xylene	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
o-Xylene	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
Tetrahydrofuran	ND		9.88	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
Ethyl ether	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
Tert-amyl methyl ether	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
Ethyl tert-butyl ether	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
di-Isopropyl ether	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
tert-Butanol	ND		98.8	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
1,4-Dioxane	ND		98.8	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
trans-1,4-Dichloro-2-butene	ND		24.7	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
Ethanol	ND		988	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
1,3-Dichloropropene, Total	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
Xylenes, Total	ND		14.8	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130			03/26/24 07:37	03/26/24 15:06	1
Toluene-d8 (Surr)	99		70 - 130			03/26/24 07:37	03/26/24 15:06	1
1,2-Dichloroethane-d4 (Surr)	103		70 - 130			03/26/24 07:37	03/26/24 15:06	1
Dibromofluoromethane (Surr)	100		70 - 130			03/26/24 07:37	03/26/24 15:06	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-7 (0-5)

Lab Sample ID: 620-17450-11

Date Collected: 03/14/24 11:10

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 91.0

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Acetone	ND		46.7	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Acrylonitrile	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Benzene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Bromobenzene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Bromochloromethane	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Bromodichloromethane	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Bromoform	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Bromomethane	ND		9.34	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
2-Butanone (MEK)	ND		9.34	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
n-Butylbenzene	ND		9.34	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
sec-Butylbenzene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
tert-Butylbenzene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Carbon disulfide	ND		9.34	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Carbon tetrachloride	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Chlorobenzene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Chloroethane	ND		9.34	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Chloroform	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Chloromethane	ND		9.34	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
2-Chlorotoluene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
4-Chlorotoluene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
1,2-Dibromo-3-Chloropropane	ND		9.34	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Dibromochloromethane	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
1,2-Dibromoethane (EDB)	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Dibromomethane	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
1,2-Dichlorobenzene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
1,3-Dichlorobenzene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
1,4-Dichlorobenzene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Dichlorodifluoromethane (Freon 12)	ND		9.34	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
1,1-Dichloroethane	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
1,2-Dichloroethane	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
1,1-Dichloroethene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
cis-1,2-Dichloroethene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
trans-1,2-Dichloroethene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
1,2-Dichloropropane	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
1,3-Dichloropropane	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
2,2-Dichloropropane	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
1,1-Dichloropropene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
cis-1,3-Dichloropropene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
trans-1,3-Dichloropropene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Ethylbenzene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Hexachlorobutadiene	ND		9.34	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
2-Hexanone (MBK)	ND		9.34	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Isopropylbenzene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
4-Isopropyltoluene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Methyl tert-butyl ether	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
4-Methyl-2-pentanone (MIBK)	ND		9.34	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Methylene Chloride	ND		9.34	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Naphthalene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1

Euofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-7 (0-5)

Lab Sample ID: 620-17450-11

Date Collected: 03/14/24 11:10

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 91.0

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
Styrene	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
1,1,1,2-Tetrachloroethane	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
1,1,2,2-Tetrachloroethane	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
Tetrachloroethene	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
Toluene	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
1,2,3-Trichlorobenzene	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
1,2,4-Trichlorobenzene	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
1,3,5-Trichlorobenzene	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
1,1,1-Trichloroethane	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
1,1,2-Trichloroethane	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
Trichloroethene	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
Trichlorofluoromethane (Freon 11)	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
1,2,3-Trichloropropane	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
1,2,4-Trimethylbenzene	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
1,3,5-Trimethylbenzene	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
Vinyl chloride	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
m,p-Xylene	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
o-Xylene	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
Tetrahydrofuran	ND		9.34	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
Ethyl ether	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
Tert-amyl methyl ether	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
Ethyl tert-butyl ether	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
di-Isopropyl ether	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
tert-Butanol	ND		93.4	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
1,4-Dioxane	ND		93.4	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
trans-1,4-Dichloro-2-butene	ND		23.4	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
Ethanol	ND		934	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
1,3-Dichloropropene, Total	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
Xylenes, Total	ND		14.0	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	03/26/24 07:37	03/26/24 15:31	1
Toluene-d8 (Surr)	99		70 - 130	03/26/24 07:37	03/26/24 15:31	1
1,2-Dichloroethane-d4 (Surr)	100		70 - 130	03/26/24 07:37	03/26/24 15:31	1
Dibromofluoromethane (Surr)	101		70 - 130	03/26/24 07:37	03/26/24 15:31	1

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-7 (5-10)

Lab Sample ID: 620-17450-12

Date Collected: 03/14/24 12:10

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 78.4

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Acetone	ND		126	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Acrylonitrile	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Benzene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Bromobenzene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Bromochloromethane	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Bromodichloromethane	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Bromoform	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Bromomethane	ND		25.3	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
2-Butanone (MEK)	ND		25.3	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
n-Butylbenzene	ND		25.3	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
sec-Butylbenzene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
tert-Butylbenzene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Carbon disulfide	ND		25.3	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Carbon tetrachloride	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Chlorobenzene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Chloroethane	ND		25.3	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Chloroform	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Chloromethane	ND		25.3	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
2-Chlorotoluene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
4-Chlorotoluene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
1,2-Dibromo-3-Chloropropane	ND		25.3	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Dibromochloromethane	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
1,2-Dibromoethane (EDB)	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Dibromomethane	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
1,2-Dichlorobenzene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
1,3-Dichlorobenzene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
1,4-Dichlorobenzene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Dichlorodifluoromethane (Freon 12)	ND		25.3	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
1,1-Dichloroethane	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
1,2-Dichloroethane	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
1,1-Dichloroethene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
cis-1,2-Dichloroethene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
trans-1,2-Dichloroethene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
1,2-Dichloropropane	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
1,3-Dichloropropane	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
2,2-Dichloropropane	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
1,1-Dichloropropene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
cis-1,3-Dichloropropene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
trans-1,3-Dichloropropene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Ethylbenzene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Hexachlorobutadiene	ND		25.3	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
2-Hexanone (MBK)	ND		25.3	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Isopropylbenzene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
4-Isopropyltoluene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Methyl tert-butyl ether	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
4-Methyl-2-pentanone (MIBK)	ND		25.3	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Methylene Chloride	ND		25.3	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Naphthalene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1

Euofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-7 (5-10)

Lab Sample ID: 620-17450-12

Date Collected: 03/14/24 12:10

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 78.4

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
Styrene	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
1,1,1,2-Tetrachloroethane	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
1,1,2,2-Tetrachloroethane	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
Tetrachloroethene	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
Toluene	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
1,2,3-Trichlorobenzene	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
1,2,4-Trichlorobenzene	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
1,3,5-Trichlorobenzene	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
1,1,1-Trichloroethane	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
1,1,2-Trichloroethane	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
Trichloroethene	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
Trichlorofluoromethane (Freon 11)	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
1,2,3-Trichloropropane	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
1,2,4-Trimethylbenzene	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
1,3,5-Trimethylbenzene	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
Vinyl chloride	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
m,p-Xylene	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
o-Xylene	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
Tetrahydrofuran	ND		25.3	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
Ethyl ether	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
Tert-amyl methyl ether	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
Ethyl tert-butyl ether	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
di-Isopropyl ether	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
tert-Butanol	ND		253	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
1,4-Dioxane	ND		253	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
trans-1,4-Dichloro-2-butene	ND		63.2	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
Ethanol	ND		2530	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
1,3-Dichloropropene, Total	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
Xylenes, Total	ND		37.9	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	03/26/24 07:37	03/26/24 15:57	1
Toluene-d8 (Surr)	99		70 - 130	03/26/24 07:37	03/26/24 15:57	1
1,2-Dichloroethane-d4 (Surr)	103		70 - 130	03/26/24 07:37	03/26/24 15:57	1
Dibromofluoromethane (Surr)	102		70 - 130	03/26/24 07:37	03/26/24 15:57	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-6 (0-5)

Lab Sample ID: 620-17450-13

Date Collected: 03/14/24 12:30

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 89.6

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Acetone	ND		52.1	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Acrylonitrile	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Benzene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Bromobenzene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Bromochloromethane	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Bromodichloromethane	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Bromoform	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Bromomethane	ND		10.4	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
2-Butanone (MEK)	ND		10.4	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
n-Butylbenzene	ND		10.4	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
sec-Butylbenzene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
tert-Butylbenzene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Carbon disulfide	ND		10.4	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Carbon tetrachloride	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Chlorobenzene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Chloroethane	ND		10.4	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Chloroform	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Chloromethane	ND		10.4	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
2-Chlorotoluene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
4-Chlorotoluene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
1,2-Dibromo-3-Chloropropane	ND		10.4	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Dibromochloromethane	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
1,2-Dibromoethane (EDB)	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Dibromomethane	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
1,2-Dichlorobenzene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
1,3-Dichlorobenzene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
1,4-Dichlorobenzene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Dichlorodifluoromethane (Freon 12)	ND		10.4	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
1,1-Dichloroethane	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
1,2-Dichloroethane	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
1,1-Dichloroethene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
cis-1,2-Dichloroethene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
trans-1,2-Dichloroethene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
1,2-Dichloropropane	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
1,3-Dichloropropane	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
2,2-Dichloropropane	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
1,1-Dichloropropene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
cis-1,3-Dichloropropene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
trans-1,3-Dichloropropene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Ethylbenzene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Hexachlorobutadiene	ND		10.4	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
2-Hexanone (MBK)	ND		10.4	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Isopropylbenzene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
4-Isopropyltoluene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Methyl tert-butyl ether	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
4-Methyl-2-pentanone (MIBK)	ND		10.4	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Methylene Chloride	ND		10.4	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Naphthalene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1

Euofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-6 (0-5)

Lab Sample ID: 620-17450-13

Date Collected: 03/14/24 12:30

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 89.6

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
Styrene	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
1,1,1,2-Tetrachloroethane	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
1,1,2,2-Tetrachloroethane	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
Tetrachloroethene	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
Toluene	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
1,2,3-Trichlorobenzene	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
1,2,4-Trichlorobenzene	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
1,3,5-Trichlorobenzene	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
1,1,1-Trichloroethane	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
1,1,2-Trichloroethane	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
Trichloroethene	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
Trichlorofluoromethane (Freon 11)	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
1,2,3-Trichloropropane	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
1,2,4-Trimethylbenzene	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
1,3,5-Trimethylbenzene	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
Vinyl chloride	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
m,p-Xylene	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
o-Xylene	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
Tetrahydrofuran	ND		10.4	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
Ethyl ether	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
Tert-amyl methyl ether	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
Ethyl tert-butyl ether	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
di-Isopropyl ether	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
tert-Butanol	ND		104	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
1,4-Dioxane	ND		104	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
trans-1,4-Dichloro-2-butene	ND		26.1	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
Ethanol	ND		1040	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
1,3-Dichloropropene, Total	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
Xylenes, Total	ND		15.6	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130	03/26/24 07:37	03/26/24 16:24	1
Toluene-d8 (Surr)	99		70 - 130	03/26/24 07:37	03/26/24 16:24	1
1,2-Dichloroethane-d4 (Surr)	99		70 - 130	03/26/24 07:37	03/26/24 16:24	1
Dibromofluoromethane (Surr)	101		70 - 130	03/26/24 07:37	03/26/24 16:24	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-6 (5-10)

Lab Sample ID: 620-17450-14

Date Collected: 03/14/24 12:45

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 92.6

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Acetone	ND		57.5	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Acrylonitrile	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Benzene	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Bromobenzene	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Bromochloromethane	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Bromodichloromethane	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Bromoform	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Bromomethane	ND		11.5	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
2-Butanone (MEK)	ND		11.5	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
n-Butylbenzene	ND		11.5	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
sec-Butylbenzene	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
tert-Butylbenzene	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Carbon disulfide	ND		11.5	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Carbon tetrachloride	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Chlorobenzene	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Chloroethane	ND		11.5	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Chloroform	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Chloromethane	ND		11.5	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
2-Chlorotoluene	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
4-Chlorotoluene	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
1,2-Dibromo-3-Chloropropane	ND		11.5	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Dibromochloromethane	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
1,2-Dibromoethane (EDB)	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Dibromomethane	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
1,2-Dichlorobenzene	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
1,3-Dichlorobenzene	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
1,4-Dichlorobenzene	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Dichlorodifluoromethane (Freon 12)	ND		11.5	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
1,1-Dichloroethane	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
1,2-Dichloroethane	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
1,1-Dichloroethene	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
cis-1,2-Dichloroethene	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
trans-1,2-Dichloroethene	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
1,2-Dichloropropane	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
1,3-Dichloropropane	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
2,2-Dichloropropane	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
1,1-Dichloropropene	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
cis-1,3-Dichloropropene	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
trans-1,3-Dichloropropene	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Ethylbenzene	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Hexachlorobutadiene	ND		11.5	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
2-Hexanone (MBK)	ND		11.5	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Isopropylbenzene	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
4-Isopropyltoluene	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Methyl tert-butyl ether	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
4-Methyl-2-pentanone (MIBK)	ND		11.5	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Methylene Chloride	ND		11.5	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Naphthalene	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1

Euofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-6 (5-10)

Lab Sample ID: 620-17450-14

Date Collected: 03/14/24 12:45

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 92.6

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Styrene	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
1,1,1,2-Tetrachloroethane	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
1,1,2,2-Tetrachloroethane	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Tetrachloroethene	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Toluene	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
1,2,3-Trichlorobenzene	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
1,2,4-Trichlorobenzene	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
1,3,5-Trichlorobenzene	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
1,1,1-Trichloroethane	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
1,1,2-Trichloroethane	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Trichloroethene	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Trichlorofluoromethane (Freon 11)	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
1,2,3-Trichloropropane	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
1,2,4-Trimethylbenzene	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
1,3,5-Trimethylbenzene	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Vinyl chloride	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
m,p-Xylene	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
o-Xylene	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Tetrahydrofuran	ND		11.5	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Ethyl ether	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Tert-amyl methyl ether	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Ethyl tert-butyl ether	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
di-Isopropyl ether	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
tert-Butanol	ND		115	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
1,4-Dioxane	ND		115	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
trans-1,4-Dichloro-2-butene	ND		28.8	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Ethanol	ND		1150	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
1,3-Dichloropropene, Total	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Xylenes, Total	ND		17.3	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	03/26/24 07:37	03/26/24 16:50	1
Toluene-d8 (Surr)	99		70 - 130	03/26/24 07:37	03/26/24 16:50	1
1,2-Dichloroethane-d4 (Surr)	101		70 - 130	03/26/24 07:37	03/26/24 16:50	1
Dibromofluoromethane (Surr)	101		70 - 130	03/26/24 07:37	03/26/24 16:50	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-4 (0-5)

Lab Sample ID: 620-17450-15

Date Collected: 03/14/24 13:40

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 89.4

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Acetone	ND		50.4	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Acrylonitrile	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Benzene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Bromobenzene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Bromochloromethane	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Bromodichloromethane	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Bromoform	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Bromomethane	ND		10.1	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
2-Butanone (MEK)	ND		10.1	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
n-Butylbenzene	ND		10.1	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
sec-Butylbenzene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
tert-Butylbenzene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Carbon disulfide	ND		10.1	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Carbon tetrachloride	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Chlorobenzene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Chloroethane	ND		10.1	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Chloroform	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Chloromethane	ND		10.1	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
2-Chlorotoluene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
4-Chlorotoluene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,2-Dibromo-3-Chloropropane	ND		10.1	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Dibromochloromethane	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,2-Dibromoethane (EDB)	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Dibromomethane	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,2-Dichlorobenzene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,3-Dichlorobenzene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,4-Dichlorobenzene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Dichlorodifluoromethane (Freon 12)	ND		10.1	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,1-Dichloroethane	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,2-Dichloroethane	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,1-Dichloroethene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
cis-1,2-Dichloroethene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
trans-1,2-Dichloroethene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,2-Dichloropropane	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,3-Dichloropropane	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
2,2-Dichloropropane	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,1-Dichloropropene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
cis-1,3-Dichloropropene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
trans-1,3-Dichloropropene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Ethylbenzene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Hexachlorobutadiene	ND		10.1	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
2-Hexanone (MBK)	ND		10.1	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Isopropylbenzene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
4-Isopropyltoluene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Methyl tert-butyl ether	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
4-Methyl-2-pentanone (MIBK)	ND		10.1	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Methylene Chloride	ND		10.1	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Naphthalene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1

Euofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-4 (0-5)

Lab Sample ID: 620-17450-15

Date Collected: 03/14/24 13:40

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 89.4

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Styrene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,1,1,2-Tetrachloroethane	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,1,2,2-Tetrachloroethane	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Tetrachloroethene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Toluene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,2,3-Trichlorobenzene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,2,4-Trichlorobenzene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,3,5-Trichlorobenzene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,1,1-Trichloroethane	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,1,2-Trichloroethane	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Trichloroethene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Trichlorofluoromethane (Freon 11)	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,2,3-Trichloropropane	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,2,4-Trimethylbenzene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,3,5-Trimethylbenzene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Vinyl chloride	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
m,p-Xylene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
o-Xylene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Tetrahydrofuran	ND		10.1	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Ethyl ether	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Tert-amyl methyl ether	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Ethyl tert-butyl ether	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
di-Isopropyl ether	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
tert-Butanol	ND		101	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,4-Dioxane	ND		101	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
trans-1,4-Dichloro-2-butene	ND		25.2	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Ethanol	ND		1010	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,3-Dichloropropene, Total	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Xylenes, Total	ND		15.1	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	03/26/24 07:37	03/26/24 17:15	1
Toluene-d8 (Surr)	100		70 - 130	03/26/24 07:37	03/26/24 17:15	1
1,2-Dichloroethane-d4 (Surr)	108		70 - 130	03/26/24 07:37	03/26/24 17:15	1
Dibromofluoromethane (Surr)	103		70 - 130	03/26/24 07:37	03/26/24 17:15	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-4 (5-10)

Lab Sample ID: 620-17450-16

Date Collected: 03/14/24 13:55

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 92.2

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
Acetone	ND		52.6	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
Acrylonitrile	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
Benzene	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
Bromobenzene	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
Bromochloromethane	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
Bromodichloromethane	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
Bromoform	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
Bromomethane	ND		10.5	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
2-Butanone (MEK)	ND		10.5	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
n-Butylbenzene	ND		10.5	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
sec-Butylbenzene	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
tert-Butylbenzene	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
Carbon disulfide	ND		10.5	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
Carbon tetrachloride	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
Chlorobenzene	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
Chloroethane	ND		10.5	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
Chloroform	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
Chloromethane	ND		10.5	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
2-Chlorotoluene	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
4-Chlorotoluene	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
1,2-Dibromo-3-Chloropropane	ND		10.5	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
Dibromochloromethane	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
1,2-Dibromoethane (EDB)	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
Dibromomethane	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
1,2-Dichlorobenzene	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
1,3-Dichlorobenzene	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
1,4-Dichlorobenzene	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
Dichlorodifluoromethane (Freon 12)	ND		10.5	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
1,1-Dichloroethane	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
1,2-Dichloroethane	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
1,1-Dichloroethene	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
cis-1,2-Dichloroethene	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
trans-1,2-Dichloroethene	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
1,2-Dichloropropane	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
1,3-Dichloropropane	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
2,2-Dichloropropane	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
1,1-Dichloropropene	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
cis-1,3-Dichloropropene	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
trans-1,3-Dichloropropene	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
Ethylbenzene	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
Hexachlorobutadiene	ND		10.5	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
2-Hexanone (MBK)	ND		10.5	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
Isopropylbenzene	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
4-Isopropyltoluene	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
Methyl tert-butyl ether	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
4-Methyl-2-pentanone (MIBK)	ND		10.5	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
Methylene Chloride	ND		10.5	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1
Naphthalene	ND		5.26	ug/Kg	☆	03/26/24 07:37	03/26/24 17:41	1

Euofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-4 (5-10)

Lab Sample ID: 620-17450-16

Date Collected: 03/14/24 13:55

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 92.2

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Styrene	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
1,1,1,2-Tetrachloroethane	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
1,1,2,2-Tetrachloroethane	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Tetrachloroethene	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Toluene	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
1,2,3-Trichlorobenzene	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
1,2,4-Trichlorobenzene	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
1,3,5-Trichlorobenzene	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
1,1,1-Trichloroethane	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
1,1,2-Trichloroethane	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Trichloroethene	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Trichlorofluoromethane (Freon 11)	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
1,2,3-Trichloropropane	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
1,2,4-Trimethylbenzene	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
1,3,5-Trimethylbenzene	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Vinyl chloride	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
m,p-Xylene	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
o-Xylene	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Tetrahydrofuran	ND		10.5	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Ethyl ether	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Tert-amyl methyl ether	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Ethyl tert-butyl ether	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
di-Isopropyl ether	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
tert-Butanol	ND		105	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
1,4-Dioxane	ND		105	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
trans-1,4-Dichloro-2-butene	ND		26.3	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Ethanol	ND		1050	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
1,3-Dichloropropene, Total	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Xylenes, Total	ND		15.8	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	03/26/24 07:37	03/26/24 17:41	1
Toluene-d8 (Surr)	99		70 - 130	03/26/24 07:37	03/26/24 17:41	1
1,2-Dichloroethane-d4 (Surr)	102		70 - 130	03/26/24 07:37	03/26/24 17:41	1
Dibromofluoromethane (Surr)	100		70 - 130	03/26/24 07:37	03/26/24 17:41	1

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-5 (0-5)

Lab Sample ID: 620-17450-17

Date Collected: 03/14/24 14:25

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 89.7

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Acetone	ND		49.2	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Acrylonitrile	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Benzene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Bromobenzene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Bromochloromethane	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Bromodichloromethane	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Bromoform	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Bromomethane	ND		9.85	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
2-Butanone (MEK)	ND		9.85	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
n-Butylbenzene	ND		9.85	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
sec-Butylbenzene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
tert-Butylbenzene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Carbon disulfide	ND		9.85	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Carbon tetrachloride	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Chlorobenzene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Chloroethane	ND		9.85	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Chloroform	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Chloromethane	ND		9.85	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
2-Chlorotoluene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
4-Chlorotoluene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
1,2-Dibromo-3-Chloropropane	ND		9.85	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Dibromochloromethane	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
1,2-Dibromoethane (EDB)	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Dibromomethane	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
1,2-Dichlorobenzene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
1,3-Dichlorobenzene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
1,4-Dichlorobenzene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Dichlorodifluoromethane (Freon 12)	ND		9.85	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
1,1-Dichloroethane	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
1,2-Dichloroethane	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
1,1-Dichloroethene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
cis-1,2-Dichloroethene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
trans-1,2-Dichloroethene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
1,2-Dichloropropane	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
1,3-Dichloropropane	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
2,2-Dichloropropane	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
1,1-Dichloropropene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
cis-1,3-Dichloropropene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
trans-1,3-Dichloropropene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Ethylbenzene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Hexachlorobutadiene	ND		9.85	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
2-Hexanone (MBK)	ND		9.85	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Isopropylbenzene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
4-Isopropyltoluene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Methyl tert-butyl ether	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
4-Methyl-2-pentanone (MIBK)	ND		9.85	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Methylene Chloride	ND		9.85	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Naphthalene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1

Euofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-5 (0-5)

Lab Sample ID: 620-17450-17

Date Collected: 03/14/24 14:25

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 89.7

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
Styrene	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
1,1,1,2-Tetrachloroethane	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
1,1,2,2-Tetrachloroethane	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
Tetrachloroethene	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
Toluene	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
1,2,3-Trichlorobenzene	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
1,2,4-Trichlorobenzene	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
1,3,5-Trichlorobenzene	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
1,1,1-Trichloroethane	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
1,1,2-Trichloroethane	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
Trichloroethene	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
Trichlorofluoromethane (Freon 11)	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
1,2,3-Trichloropropane	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
1,2,4-Trimethylbenzene	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
1,3,5-Trimethylbenzene	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
Vinyl chloride	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
m,p-Xylene	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
o-Xylene	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
Tetrahydrofuran	ND		9.85	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
Ethyl ether	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
Tert-amyl methyl ether	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
Ethyl tert-butyl ether	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
di-Isopropyl ether	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
tert-Butanol	ND		98.5	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
1,4-Dioxane	ND		98.5	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
trans-1,4-Dichloro-2-butene	ND		24.6	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
Ethanol	ND		985	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
1,3-Dichloropropene, Total	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
Xylenes, Total	ND		14.8	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	03/26/24 07:37	03/26/24 18:07	1
Toluene-d8 (Surr)	98		70 - 130	03/26/24 07:37	03/26/24 18:07	1
1,2-Dichloroethane-d4 (Surr)	101		70 - 130	03/26/24 07:37	03/26/24 18:07	1
Dibromofluoromethane (Surr)	101		70 - 130	03/26/24 07:37	03/26/24 18:07	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-5 (5-10)

Lab Sample ID: 620-17450-18

Date Collected: 03/14/24 12:10

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 92.9

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Acetone	ND		44.3	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Acrylonitrile	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Benzene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Bromobenzene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Bromochloromethane	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Bromodichloromethane	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Bromoform	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Bromomethane	ND		8.87	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
2-Butanone (MEK)	ND		8.87	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
n-Butylbenzene	ND		8.87	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
sec-Butylbenzene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
tert-Butylbenzene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Carbon disulfide	ND		8.87	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Carbon tetrachloride	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Chlorobenzene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Chloroethane	ND		8.87	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Chloroform	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Chloromethane	ND		8.87	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
2-Chlorotoluene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
4-Chlorotoluene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
1,2-Dibromo-3-Chloropropane	ND		8.87	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Dibromochloromethane	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
1,2-Dibromoethane (EDB)	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Dibromomethane	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
1,2-Dichlorobenzene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
1,3-Dichlorobenzene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
1,4-Dichlorobenzene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Dichlorodifluoromethane (Freon 12)	ND		8.87	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
1,1-Dichloroethane	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
1,2-Dichloroethane	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
1,1-Dichloroethene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
cis-1,2-Dichloroethene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
trans-1,2-Dichloroethene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
1,2-Dichloropropane	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
1,3-Dichloropropane	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
2,2-Dichloropropane	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
1,1-Dichloropropene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
cis-1,3-Dichloropropene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
trans-1,3-Dichloropropene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Ethylbenzene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Hexachlorobutadiene	ND		8.87	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
2-Hexanone (MBK)	ND		8.87	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Isopropylbenzene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
4-Isopropyltoluene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Methyl tert-butyl ether	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
4-Methyl-2-pentanone (MIBK)	ND		8.87	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Methylene Chloride	ND		8.87	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Naphthalene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1

Euofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-5 (5-10)

Lab Sample ID: 620-17450-18

Date Collected: 03/14/24 12:10

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 92.9

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
Styrene	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
1,1,1,2-Tetrachloroethane	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
1,1,2,2-Tetrachloroethane	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
Tetrachloroethene	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
Toluene	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
1,2,3-Trichlorobenzene	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
1,2,4-Trichlorobenzene	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
1,3,5-Trichlorobenzene	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
1,1,1-Trichloroethane	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
1,1,2-Trichloroethane	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
Trichloroethene	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
Trichlorofluoromethane (Freon 11)	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
1,2,3-Trichloropropane	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
1,2,4-Trimethylbenzene	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
1,3,5-Trimethylbenzene	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
Vinyl chloride	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
m,p-Xylene	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
o-Xylene	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
Tetrahydrofuran	ND		8.87	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
Ethyl ether	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
Tert-amyl methyl ether	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
Ethyl tert-butyl ether	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
di-Isopropyl ether	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
tert-Butanol	ND		88.7	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
1,4-Dioxane	ND		88.7	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
trans-1,4-Dichloro-2-butene	ND		22.2	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
Ethanol	ND		887	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
1,3-Dichloropropene, Total	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
Xylenes, Total	ND		13.3	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	03/26/24 07:37	03/26/24 18:33	1
Toluene-d8 (Surr)	100		70 - 130	03/26/24 07:37	03/26/24 18:33	1
1,2-Dichloroethane-d4 (Surr)	102		70 - 130	03/26/24 07:37	03/26/24 18:33	1
Dibromofluoromethane (Surr)	101		70 - 130	03/26/24 07:37	03/26/24 18:33	1

Eurofins New England

Surrogate Summary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		BFB (70-130)	TOL (70-130)	DCA (70-130)	DBFM (70-130)
620-17450-1	ATC-3 (0-5)	97	97	99	97
620-17450-2	ATC-3 (5-10)	97	98	100	100
620-17450-3	ATC-2 (0-5)	97	97	100	100
620-17450-4	ATC-2 (5-10)	99	99	113	105
620-17450-5	ATC-1 (0-5)	97	99	101	100
620-17450-6	ATC-1 (5-10)	97	99	101	101
620-17450-9	ATC-8 (0-5)	98	98	101	100
620-17450-10	ATC-8 (5-10)	99	99	103	100
620-17450-11	ATC-7 (0-5)	97	99	100	101
620-17450-12	ATC-7 (5-10)	96	99	103	102
620-17450-13	ATC-6 (0-5)	95	99	99	101
620-17450-14	ATC-6 (5-10)	96	99	101	101
620-17450-15	ATC-4 (0-5)	97	100	108	103
620-17450-16	ATC-4 (5-10)	99	99	102	100
620-17450-17	ATC-5 (0-5)	96	98	101	101
620-17450-18	ATC-5 (5-10)	96	100	102	101
LCS 620-33086/1-A	Lab Control Sample	100	100	99	101
LCSD 620-33086/2-A	Lab Control Sample Dup	100	101	98	101
MB 620-33086/3-A	Method Blank	100	99	102	100

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

DCA = 1,2-Dichloroethane-d4 (Surr)

DBFM = Dibromofluoromethane (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		FBP (30-130)	2FP (15-110)	NBZ (30-130)	PHL (15-110)	TBP (15-110)	TPHL (30-130)
620-17450-7	Comp (0-5)	50	50	39	54	63	76
620-17450-8	Comp (5-10)	41	45	42	45	48	65
LCS 620-32927/2-A	Lab Control Sample	75	75	71	76	77	77
LCSD 620-32927/3-A	Lab Control Sample Dup	73	75	68	75	79	85
MB 620-32927/1-A	Method Blank	56	64	50	60	58	86

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)

2FP = 2-Fluorophenol (Surr)

NBZ = Nitrobenzene-d5 (Surr)

PHL = Phenol-d5 (Surr)

TBP = 2,4,6-Tribromophenol (Surr)

TPHL = Terphenyl-d14 (Surr)

Eurofins New England

Surrogate Summary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
Lab Sample ID	Client Sample ID	NBZ (30-130)	TPHL (30-130)	FBP (30-130)
620-17450-7	Comp (0-5)	43	76	51
620-17450-8	Comp (5-10)	46	65	41
MB 620-32927/1-A	Method Blank	55	86	57
Surrogate Legend				
NBZ = Nitrobenzene-d5 (Surr)				
TPHL = Terphenyl-d14 (Surr)				
FBP = 2-Fluorobiphenyl (Surr)				

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	TCX1 (30-150)	DCB1 (30-150)
620-17450-7	Comp (0-5)	73	88
620-17450-8	Comp (5-10)	79	66
Surrogate Legend			
TCX = Tetrachloro-m-xylene			
DCB = DCB Decachlorobiphenyl (Surr)			

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1COD (40-140)	OTPH (40-140)
620-17450-7	Comp (0-5)	100	72
620-17450-8	Comp (5-10)	84	73
LCS 620-32878/2-A	Lab Control Sample	84	79
LCSD 620-32878/3-A	Lab Control Sample Dup	69	64
MB 620-32878/1-A	Method Blank	58	55
Surrogate Legend			
1COD = 1-Chlorooctadecane (Surr)			
OTPH = o-Terphenyl (Surr)			

QC Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 620-33086/3-A

Matrix: Solid

Analysis Batch: 33087

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 33086

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Acetone	ND		50.0	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Acrylonitrile	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Benzene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Bromobenzene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Bromochloromethane	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Bromodichloromethane	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Bromoform	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Bromomethane	ND		10.0	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
2-Butanone (MEK)	ND		10.0	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
n-Butylbenzene	ND		10.0	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
sec-Butylbenzene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
tert-Butylbenzene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Carbon disulfide	ND		10.0	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Carbon tetrachloride	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Chlorobenzene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Chloroethane	ND		10.0	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Chloroform	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Chloromethane	ND		10.0	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
2-Chlorotoluene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
4-Chlorotoluene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,2-Dibromo-3-Chloropropane	ND		10.0	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Dibromochloromethane	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,2-Dibromoethane (EDB)	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Dibromomethane	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,2-Dichlorobenzene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,3-Dichlorobenzene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,4-Dichlorobenzene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Dichlorodifluoromethane (Freon 12)	ND		10.0	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,1-Dichloroethane	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,2-Dichloroethane	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,1-Dichloroethene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
cis-1,2-Dichloroethene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
trans-1,2-Dichloroethene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,2-Dichloropropane	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,3-Dichloropropane	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
2,2-Dichloropropane	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,1-Dichloropropene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
cis-1,3-Dichloropropene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
trans-1,3-Dichloropropene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Ethylbenzene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Hexachlorobutadiene	ND		10.0	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
2-Hexanone (MBK)	ND		10.0	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Isopropylbenzene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
4-Isopropyltoluene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Methyl tert-butyl ether	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Methylene Chloride	ND		10.0	ug/Kg		03/26/24 07:37	03/26/24 10:56	1

Eurofins New England

QC Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 620-33086/3-A

Matrix: Solid

Analysis Batch: 33087

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 33086

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
N-Propylbenzene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Styrene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,1,1,2-Tetrachloroethane	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,1,1,2,2-Tetrachloroethane	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Tetrachloroethene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Toluene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,2,3-Trichlorobenzene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,2,4-Trichlorobenzene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,3,5-Trichlorobenzene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,1,1-Trichloroethane	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,1,2-Trichloroethane	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Trichloroethene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Trichlorofluoromethane (Freon 11)	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,2,3-Trichloropropane	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,2,4-Trimethylbenzene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,3,5-Trimethylbenzene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Vinyl chloride	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
m,p-Xylene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
o-Xylene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Tetrahydrofuran	ND		10.0	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Ethyl ether	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Tert-amyl methyl ether	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Ethyl tert-butyl ether	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
di-Isopropyl ether	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
tert-Butanol	ND		100	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,4-Dioxane	ND		100	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
trans-1,4-Dichloro-2-butene	ND		25.0	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Ethanol	ND		1000	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,3-Dichloropropene, Total	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Xylenes, Total	ND		15.0	ug/Kg		03/26/24 07:37	03/26/24 10:56	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	03/26/24 07:37	03/26/24 10:56	1
Toluene-d8 (Surr)	99		70 - 130	03/26/24 07:37	03/26/24 10:56	1
1,2-Dichloroethane-d4 (Surr)	102		70 - 130	03/26/24 07:37	03/26/24 10:56	1
Dibromofluoromethane (Surr)	100		70 - 130	03/26/24 07:37	03/26/24 10:56	1

Lab Sample ID: LCS 620-33086/1-A

Matrix: Solid

Analysis Batch: 33087

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 33086

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.0	18.80		ug/Kg		94	70 - 130
Acetone	20.0	19.91	J	ug/Kg		100	70 - 130
Acrylonitrile	20.0	18.90		ug/Kg		94	70 - 130
Benzene	20.0	19.74		ug/Kg		99	70 - 130
Bromobenzene	20.0	19.44		ug/Kg		97	70 - 130

Eurofins New England

QC Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 620-33086/1-A

Matrix: Solid

Analysis Batch: 33087

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 33086

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromochloromethane	20.0	19.65		ug/Kg		98	70 - 130
Bromodichloromethane	20.0	19.48		ug/Kg		97	70 - 130
Bromoform	20.0	18.46		ug/Kg		92	70 - 130
Bromomethane	20.0	18.25		ug/Kg		91	70 - 130
2-Butanone (MEK)	20.0	20.90		ug/Kg		105	70 - 130
n-Butylbenzene	20.0	18.28		ug/Kg		91	70 - 130
sec-Butylbenzene	20.0	19.96		ug/Kg		100	70 - 130
tert-Butylbenzene	20.0	18.99		ug/Kg		95	70 - 130
Carbon disulfide	20.0	19.07		ug/Kg		95	70 - 130
Carbon tetrachloride	20.0	19.07		ug/Kg		95	70 - 130
Chlorobenzene	20.0	19.44		ug/Kg		97	70 - 130
Chloroethane	20.0	18.66		ug/Kg		93	70 - 130
Chloroform	20.0	19.45		ug/Kg		97	70 - 130
Chloromethane	20.0	19.80		ug/Kg		99	70 - 130
2-Chlorotoluene	20.0	19.62		ug/Kg		98	70 - 130
4-Chlorotoluene	20.0	19.41		ug/Kg		97	70 - 130
1,2-Dibromo-3-Chloropropane	20.0	19.73		ug/Kg		99	70 - 130
Dibromochloromethane	20.0	19.12		ug/Kg		96	70 - 130
1,2-Dibromoethane (EDB)	20.0	19.94		ug/Kg		100	70 - 130
Dibromomethane	20.0	19.81		ug/Kg		99	70 - 130
1,2-Dichlorobenzene	20.0	18.21		ug/Kg		91	70 - 130
1,3-Dichlorobenzene	20.0	19.39		ug/Kg		97	70 - 130
1,4-Dichlorobenzene	20.0	18.93		ug/Kg		95	70 - 130
Dichlorodifluoromethane (Freon 12)	20.0	18.58		ug/Kg		93	70 - 130
1,1-Dichloroethane	20.0	19.53		ug/Kg		98	70 - 130
1,2-Dichloroethane	20.0	19.50		ug/Kg		98	70 - 130
1,1-Dichloroethene	20.0	19.27		ug/Kg		96	70 - 130
cis-1,2-Dichloroethene	20.0	19.92		ug/Kg		100	70 - 130
trans-1,2-Dichloroethene	20.0	19.75		ug/Kg		99	70 - 130
1,2-Dichloropropane	20.0	19.63		ug/Kg		98	70 - 130
1,3-Dichloropropane	20.0	20.01		ug/Kg		100	70 - 130
2,2-Dichloropropane	20.0	19.68		ug/Kg		98	70 - 130
1,1-Dichloropropene	20.0	20.07		ug/Kg		100	70 - 130
cis-1,3-Dichloropropene	20.0	19.44		ug/Kg		97	70 - 130
trans-1,3-Dichloropropene	20.0	19.97		ug/Kg		100	70 - 130
Ethylbenzene	20.0	19.70		ug/Kg		98	70 - 130
Hexachlorobutadiene	20.0	18.83		ug/Kg		94	70 - 130
2-Hexanone (MBK)	20.0	18.68		ug/Kg		93	70 - 130
Isopropylbenzene	20.0	19.06		ug/Kg		95	70 - 130
4-Isopropyltoluene	20.0	19.14		ug/Kg		96	70 - 130
Methyl tert-butyl ether	20.0	20.44		ug/Kg		102	70 - 130
4-Methyl-2-pentanone (MIBK)	20.0	20.57		ug/Kg		103	70 - 130
Methylene Chloride	20.0	19.10		ug/Kg		95	70 - 130
Naphthalene	20.0	20.69		ug/Kg		103	70 - 130
N-Propylbenzene	20.0	19.71		ug/Kg		99	70 - 130
Styrene	20.0	19.27		ug/Kg		96	70 - 130
1,1,1,2-Tetrachloroethane	20.0	19.24		ug/Kg		96	70 - 130
1,1,2,2-Tetrachloroethane	20.0	19.05		ug/Kg		95	70 - 130

Eurofins New England

QC Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 620-33086/1-A

Matrix: Solid

Analysis Batch: 33087

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 33086

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Tetrachloroethene	20.0	19.72		ug/Kg		99	70 - 130
Toluene	20.0	19.65		ug/Kg		98	70 - 130
1,2,3-Trichlorobenzene	20.0	20.91		ug/Kg		105	70 - 130
1,2,4-Trichlorobenzene	20.0	19.81		ug/Kg		99	70 - 130
1,3,5-Trichlorobenzene	20.0	18.74		ug/Kg		94	70 - 130
1,1,1-Trichloroethane	20.0	19.38		ug/Kg		97	70 - 130
1,1,2-Trichloroethane	20.0	19.62		ug/Kg		98	70 - 130
Trichloroethene	20.0	19.07		ug/Kg		95	70 - 130
Trichlorofluoromethane (Freon 11)	20.0	19.01		ug/Kg		95	70 - 130
1,2,3-Trichloropropane	20.0	19.44		ug/Kg		97	70 - 130
1,2,4-Trimethylbenzene	20.0	18.86		ug/Kg		94	70 - 130
1,3,5-Trimethylbenzene	20.0	19.64		ug/Kg		98	70 - 130
Vinyl chloride	20.0	18.81		ug/Kg		94	70 - 130
m,p-Xylene	20.0	19.63		ug/Kg		98	70 - 130
o-Xylene	20.0	19.32		ug/Kg		97	70 - 130
Tetrahydrofuran	20.0	20.17		ug/Kg		101	70 - 130
Ethyl ether	20.0	19.60		ug/Kg		98	70 - 130
Tert-amyl methyl ether	20.0	19.75		ug/Kg		99	70 - 130
Ethyl tert-butyl ether	20.0	20.42		ug/Kg		102	70 - 130
di-Isopropyl ether	20.0	20.16		ug/Kg		101	70 - 130
tert-Butanol	200	215.9		ug/Kg		108	70 - 130
1,4-Dioxane	200	209.6		ug/Kg		105	70 - 130
trans-1,4-Dichloro-2-butene	20.0	18.36	J	ug/Kg		92	70 - 130
Ethanol	400	389.9	J	ug/Kg		97	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
Toluene-d8 (Surr)	100		70 - 130
1,2-Dichloroethane-d4 (Surr)	99		70 - 130
Dibromofluoromethane (Surr)	101		70 - 130

Lab Sample ID: LCSD 620-33086/2-A

Matrix: Solid

Analysis Batch: 33087

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 33086

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.0	19.20		ug/Kg		96	70 - 130	2	30
Acetone	20.0	17.70	J	ug/Kg		88	70 - 130	12	30
Acrylonitrile	20.0	18.69		ug/Kg		93	70 - 130	1	30
Benzene	20.0	19.95		ug/Kg		100	70 - 130	1	30
Bromobenzene	20.0	19.59		ug/Kg		98	70 - 130	1	30
Bromochloromethane	20.0	20.27		ug/Kg		101	70 - 130	3	30
Bromodichloromethane	20.0	19.66		ug/Kg		98	70 - 130	1	30
Bromoform	20.0	18.18		ug/Kg		91	70 - 130	2	30
Bromomethane	20.0	17.81		ug/Kg		89	70 - 130	2	30
2-Butanone (MEK)	20.0	18.73		ug/Kg		94	70 - 130	11	30
n-Butylbenzene	20.0	18.30		ug/Kg		92	70 - 130	0	30

Eurofins New England

QC Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 620-33086/2-A

Matrix: Solid

Analysis Batch: 33087

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 33086

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
sec-Butylbenzene	20.0	19.93		ug/Kg		100	70 - 130	0	30
tert-Butylbenzene	20.0	19.53		ug/Kg		98	70 - 130	3	30
Carbon disulfide	20.0	19.12		ug/Kg		96	70 - 130	0	30
Carbon tetrachloride	20.0	19.60		ug/Kg		98	70 - 130	3	30
Chlorobenzene	20.0	19.75		ug/Kg		99	70 - 130	2	30
Chloroethane	20.0	19.15		ug/Kg		96	70 - 130	3	30
Chloroform	20.0	19.76		ug/Kg		99	70 - 130	2	30
Chloromethane	20.0	19.69		ug/Kg		98	70 - 130	1	30
2-Chlorotoluene	20.0	19.79		ug/Kg		99	70 - 130	1	30
4-Chlorotoluene	20.0	19.50		ug/Kg		98	70 - 130	0	30
1,2-Dibromo-3-Chloropropane	20.0	19.65		ug/Kg		98	70 - 130	0	30
Dibromochloromethane	20.0	19.25		ug/Kg		96	70 - 130	1	30
1,2-Dibromoethane (EDB)	20.0	19.72		ug/Kg		99	70 - 130	1	30
Dibromomethane	20.0	19.48		ug/Kg		97	70 - 130	2	30
1,2-Dichlorobenzene	20.0	18.63		ug/Kg		93	70 - 130	2	30
1,3-Dichlorobenzene	20.0	19.50		ug/Kg		97	70 - 130	1	30
1,4-Dichlorobenzene	20.0	19.10		ug/Kg		95	70 - 130	1	30
Dichlorodifluoromethane (Freon 12)	20.0	18.81		ug/Kg		94	70 - 130	1	30
1,1-Dichloroethane	20.0	19.83		ug/Kg		99	70 - 130	2	30
1,2-Dichloroethane	20.0	19.57		ug/Kg		98	70 - 130	0	30
1,1-Dichloroethene	20.0	19.71		ug/Kg		99	70 - 130	2	30
cis-1,2-Dichloroethene	20.0	20.11		ug/Kg		101	70 - 130	1	30
trans-1,2-Dichloroethene	20.0	19.86		ug/Kg		99	70 - 130	1	30
1,2-Dichloropropane	20.0	19.78		ug/Kg		99	70 - 130	1	30
1,3-Dichloropropane	20.0	19.81		ug/Kg		99	70 - 130	1	30
2,2-Dichloropropane	20.0	19.78		ug/Kg		99	70 - 130	0	30
1,1-Dichloropropene	20.0	20.47		ug/Kg		102	70 - 130	2	30
cis-1,3-Dichloropropene	20.0	19.56		ug/Kg		98	70 - 130	1	30
trans-1,3-Dichloropropene	20.0	19.71		ug/Kg		99	70 - 130	1	30
Ethylbenzene	20.0	19.96		ug/Kg		100	70 - 130	1	30
Hexachlorobutadiene	20.0	19.93		ug/Kg		100	70 - 130	6	30
2-Hexanone (MBK)	20.0	17.22		ug/Kg		86	70 - 130	8	30
Isopropylbenzene	20.0	19.32		ug/Kg		97	70 - 130	1	30
4-Isopropyltoluene	20.0	19.59		ug/Kg		98	70 - 130	2	30
Methyl tert-butyl ether	20.0	20.32		ug/Kg		102	70 - 130	1	30
4-Methyl-2-pentanone (MIBK)	20.0	19.12		ug/Kg		96	70 - 130	7	30
Methylene Chloride	20.0	19.41		ug/Kg		97	70 - 130	2	30
Naphthalene	20.0	20.94		ug/Kg		105	70 - 130	1	30
N-Propylbenzene	20.0	19.79		ug/Kg		99	70 - 130	0	30
Styrene	20.0	19.22		ug/Kg		96	70 - 130	0	30
1,1,1,2-Tetrachloroethane	20.0	19.46		ug/Kg		97	70 - 130	1	30
1,1,2,2-Tetrachloroethane	20.0	18.74		ug/Kg		94	70 - 130	2	30
Tetrachloroethene	20.0	20.01		ug/Kg		100	70 - 130	1	30
Toluene	20.0	20.00		ug/Kg		100	70 - 130	2	30
1,2,3-Trichlorobenzene	20.0	21.12		ug/Kg		106	70 - 130	1	30
1,2,4-Trichlorobenzene	20.0	20.08		ug/Kg		100	70 - 130	1	30
1,3,5-Trichlorobenzene	20.0	19.10		ug/Kg		96	70 - 130	2	30
1,1,1-Trichloroethane	20.0	19.64		ug/Kg		98	70 - 130	1	30

Eurofins New England

QC Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 620-33086/2-A

Matrix: Solid

Analysis Batch: 33087

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 33086

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,2-Trichloroethane	20.0	19.85		ug/Kg		99	70 - 130	1	30
Trichloroethene	20.0	19.38		ug/Kg		97	70 - 130	2	30
Trichlorofluoromethane (Freon 11)	20.0	19.06		ug/Kg		95	70 - 130	0	30
1,2,3-Trichloropropane	20.0	19.00		ug/Kg		95	70 - 130	2	30
1,2,4-Trimethylbenzene	20.0	19.02		ug/Kg		95	70 - 130	1	30
1,3,5-Trimethylbenzene	20.0	19.95		ug/Kg		100	70 - 130	2	30
Vinyl chloride	20.0	18.85		ug/Kg		94	70 - 130	0	30
m,p-Xylene	20.0	19.88		ug/Kg		99	70 - 130	1	30
o-Xylene	20.0	19.51		ug/Kg		98	70 - 130	1	30
Tetrahydrofuran	20.0	19.04		ug/Kg		95	70 - 130	6	30
Ethyl ether	20.0	19.98		ug/Kg		100	70 - 130	2	30
Tert-amyl methyl ether	20.0	19.77		ug/Kg		99	70 - 130	0	30
Ethyl tert-butyl ether	20.0	20.59		ug/Kg		103	70 - 130	1	30
di-Isopropyl ether	20.0	20.36		ug/Kg		102	70 - 130	1	30
tert-Butanol	200	202.9		ug/Kg		101	70 - 130	6	30
1,4-Dioxane	200	191.8		ug/Kg		96	70 - 130	9	30
trans-1,4-Dichloro-2-butene	20.0	17.90	J	ug/Kg		90	70 - 130	2	30
Ethanol	400	313.8	J	ug/Kg		78	70 - 130	22	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
Toluene-d8 (Surr)	101		70 - 130
1,2-Dichloroethane-d4 (Surr)	98		70 - 130
Dibromofluoromethane (Surr)	101		70 - 130

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 620-32927/1-A

Matrix: Solid

Analysis Batch: 32951

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 32927

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
1,2,4-Trichlorobenzene	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
1,2-Dichlorobenzene	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
1,3-Dichlorobenzene	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
1,4-Dichlorobenzene	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
2,4,5-Trichlorophenol	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
2,4,6-Trichlorophenol	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
2,4-Dichlorophenol	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
2,4-Dimethylphenol	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
2,4-Dinitrophenol	ND		660	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
2,4-Dinitrotoluene	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
2,6-Dinitrotoluene	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
2-Chloronaphthalene	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
2-Chlorophenol	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
2-Methylphenol	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
2-Nitroaniline	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1

Eurofins New England

QC Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 620-32927/1-A

Matrix: Solid

Analysis Batch: 32951

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 32927

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitrophenol	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
3 & 4 Methylphenol	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
3,3'-Dichlorobenzidine	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
3-Nitroaniline	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
4,6-Dinitro-2-methylphenol	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
4-Bromophenyl phenyl ether	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
4-Chloro-3-methylphenol	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
4-Chloroaniline	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
4-Chlorophenyl phenyl ether	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
4-Nitroaniline	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
4-Nitrophenol	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Acetophenone	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Aniline	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Azobenzene/Diphenyldiazene	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Benzidine	ND		660	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Benzoic acid	ND		667	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Benzyl alcohol	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Bis(2-chloroethoxy)methane	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Bis(2-chloroethyl)ether	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
bis (2-chloroisopropyl) ether	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Bis(2-ethylhexyl) phthalate	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Butyl benzyl phthalate	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Carbazole	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Dibenzofuran	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Diethyl phthalate	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Dimethyl phthalate	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Di-n-butyl phthalate	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Di-n-octyl phthalate	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Hexachlorobenzene	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Hexachlorobutadiene	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Hexachlorocyclopentadiene	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Hexachloroethane	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Isophorone	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Nitrobenzene	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
N-Nitrosodimethylamine	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
N-Nitrosodi-n-propylamine	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
N-Nitrosodiphenylamine	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Pentachloronitrobenzene	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Pentachlorophenol	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Phenol	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Pyridine	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	56		30 - 130	03/21/24 08:36	03/21/24 13:46	1
2-Fluorophenol (Surr)	64		15 - 110	03/21/24 08:36	03/21/24 13:46	1
Nitrobenzene-d5 (Surr)	50		30 - 130	03/21/24 08:36	03/21/24 13:46	1
Phenol-d5 (Surr)	60		15 - 110	03/21/24 08:36	03/21/24 13:46	1
2,4,6-Tribromophenol (Surr)	58		15 - 110	03/21/24 08:36	03/21/24 13:46	1

Eurofins New England

QC Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 620-32927/1-A

Matrix: Solid

Analysis Batch: 32951

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 32927

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14 (Surr)	86		30 - 130	03/21/24 08:36	03/21/24 13:46	1

Lab Sample ID: LCS 620-32927/2-A

Matrix: Solid

Analysis Batch: 32951

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 32927

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,4,5-Tetrachlorobenzene	1670	1173		ug/Kg		70	40 - 140
1,2,4-Trichlorobenzene	1670	1139		ug/Kg		68	40 - 140
1,2-Dichlorobenzene	1670	1122		ug/Kg		67	40 - 140
1,3-Dichlorobenzene	1670	1171		ug/Kg		70	40 - 140
1,4-Dichlorobenzene	1670	1147		ug/Kg		69	40 - 140
2,4,5-Trichlorophenol	1670	1191		ug/Kg		71	30 - 130
2,4,6-Trichlorophenol	1670	1318		ug/Kg		79	30 - 130
2,4-Dichlorophenol	1670	1163		ug/Kg		70	30 - 130
2,4-Dimethylphenol	1670	1113		ug/Kg		67	30 - 130
2,4-Dinitrophenol	1670	968.3		ug/Kg		58	30 - 130
2,4-Dinitrotoluene	1670	1430		ug/Kg		86	40 - 140
2,6-Dinitrotoluene	1670	1332		ug/Kg		80	40 - 140
2-Chloronaphthalene	1670	1284		ug/Kg		77	40 - 140
2-Chlorophenol	1670	1209		ug/Kg		73	30 - 130
2-Methylphenol	1670	1235		ug/Kg		74	30 - 130
2-Nitroaniline	1670	987.5		ug/Kg		59	40 - 140
2-Nitrophenol	1670	1130		ug/Kg		68	30 - 130
3 & 4 Methylphenol	1670	1243		ug/Kg		75	30 - 130
3,3'-Dichlorobenzidine	1670	1636		ug/Kg		98	40 - 140
3-Nitroaniline	1670	733.0		ug/Kg		44	40 - 140
4,6-Dinitro-2-methylphenol	1670	1157		ug/Kg		69	30 - 130
4-Bromophenyl phenyl ether	1670	1330		ug/Kg		80	40 - 140
4-Chloro-3-methylphenol	1670	1303		ug/Kg		78	30 - 130
4-Chloroaniline	1670	520.8	*-	ug/Kg		31	40 - 140
4-Chlorophenyl phenyl ether	1670	1380		ug/Kg		83	40 - 140
4-Nitroaniline	1670	929.3		ug/Kg		56	40 - 140
4-Nitrophenol	1670	1315		ug/Kg		79	30 - 130
Acetophenone	1670	1179		ug/Kg		71	40 - 140
Aniline	1670	606.8	*-	ug/Kg		36	40 - 140
Azobenzene/Diphenyldiazene	1670	885.0		ug/Kg		53	40 - 140
Benzidine	1670	399.0	J *-	ug/Kg		24	40 - 140
Benzoic acid	1670	443.3	*-	ug/Kg		27	30 - 130
Benzyl alcohol	1670	1074		ug/Kg		64	40 - 140
Bis(2-chloroethoxy)methane	1670	1054		ug/Kg		63	40 - 140
Bis(2-chloroethyl)ether	1670	1117		ug/Kg		67	40 - 140
bis (2-chloroisopropyl) ether	1670	998.5		ug/Kg		60	40 - 140
Bis(2-ethylhexyl) phthalate	1670	1399		ug/Kg		84	40 - 140
Butyl benzyl phthalate	1670	1403		ug/Kg		84	40 - 140
Carbazole	1670	951.1		ug/Kg		57	40 - 140
Dibenzofuran	1670	1326		ug/Kg		80	40 - 140
Diethyl phthalate	1670	1365		ug/Kg		82	40 - 140

Eurofins New England

QC Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 620-32927/2-A

Matrix: Solid

Analysis Batch: 32951

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 32927

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Dimethyl phthalate	1670	1367		ug/Kg		82	40 - 140
Di-n-butyl phthalate	1670	1373		ug/Kg		82	40 - 140
Di-n-octyl phthalate	1670	1433		ug/Kg		86	40 - 140
Hexachlorobenzene	1670	1358		ug/Kg		81	40 - 140
Hexachlorobutadiene	1670	1008		ug/Kg		61	40 - 140
Hexachlorocyclopentadiene	1670	974.9		ug/Kg		58	40 - 140
Hexachloroethane	1670	1115		ug/Kg		67	40 - 140
Isophorone	1670	1043		ug/Kg		63	40 - 140
Nitrobenzene	1670	1166		ug/Kg		70	40 - 140
N-Nitrosodimethylamine	1670	824.2		ug/Kg		49	40 - 140
N-Nitrosodi-n-propylamine	1670	1231		ug/Kg		74	40 - 140
N-Nitrosodiphenylamine	1670	1452		ug/Kg		87	40 - 140
Pentachloronitrobenzene	1670	1479		ug/Kg		89	40 - 140
Pentachlorophenol	1670	1067		ug/Kg		64	30 - 130
Phenol	1670	1197		ug/Kg		72	40 - 140
Pyridine	1670	582.1	*-	ug/Kg		35	40 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl (Surr)	75		30 - 130
2-Fluorophenol (Surr)	75		15 - 110
Nitrobenzene-d5 (Surr)	71		30 - 130
Phenol-d5 (Surr)	76		15 - 110
2,4,6-Tribromophenol (Surr)	77		15 - 110
Terphenyl-d14 (Surr)	77		30 - 130

Lab Sample ID: LCSD 620-32927/3-A

Matrix: Solid

Analysis Batch: 32951

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 32927

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2,4,5-Tetrachlorobenzene	1670	1135		ug/Kg		68	40 - 140	3	30
1,2,4-Trichlorobenzene	1670	1061		ug/Kg		64	40 - 140	7	30
1,2-Dichlorobenzene	1670	1074		ug/Kg		64	40 - 140	4	30
1,3-Dichlorobenzene	1670	1105		ug/Kg		66	40 - 140	6	30
1,4-Dichlorobenzene	1670	1110		ug/Kg		67	40 - 140	3	30
2,4,5-Trichlorophenol	1670	1186		ug/Kg		71	30 - 130	0	30
2,4,6-Trichlorophenol	1670	1295		ug/Kg		78	30 - 130	2	30
2,4-Dichlorophenol	1670	1129		ug/Kg		68	30 - 130	3	30
2,4-Dimethylphenol	1670	1091		ug/Kg		65	30 - 130	2	30
2,4-Dinitrophenol	1670	994.5		ug/Kg		60	30 - 130	3	30
2,4-Dinitrotoluene	1670	1436		ug/Kg		86	40 - 140	0	30
2,6-Dinitrotoluene	1670	1348		ug/Kg		81	40 - 140	1	30
2-Chloronaphthalene	1670	1240		ug/Kg		74	40 - 140	3	30
2-Chlorophenol	1670	1173		ug/Kg		70	30 - 130	3	30
2-Methylphenol	1670	1206		ug/Kg		72	30 - 130	2	30
2-Nitroaniline	1670	994.4		ug/Kg		60	40 - 140	1	30
2-Nitrophenol	1670	1066		ug/Kg		64	30 - 130	6	30
3 & 4 Methylphenol	1670	1217		ug/Kg		73	30 - 130	2	30

Eurofins New England

QC Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 620-32927/3-A

Matrix: Solid

Analysis Batch: 32951

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 32927

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
3,3'-Dichlorobenzidine	1670	1610		ug/Kg		97	40 - 140	2	30
3-Nitroaniline	1670	716.5		ug/Kg		43	40 - 140	2	30
4,6-Dinitro-2-methylphenol	1670	1193		ug/Kg		72	30 - 130	3	30
4-Bromophenyl phenyl ether	1670	1332		ug/Kg		80	40 - 140	0	30
4-Chloro-3-methylphenol	1670	1264		ug/Kg		76	30 - 130	3	30
4-Chloroaniline	1670	433.8	*-	ug/Kg		26	40 - 140	18	30
4-Chlorophenyl phenyl ether	1670	1388		ug/Kg		83	40 - 140	1	30
4-Nitroaniline	1670	969.4		ug/Kg		58	40 - 140	4	30
4-Nitrophenol	1670	1261		ug/Kg		76	30 - 130	4	30
Acetophenone	1670	1136		ug/Kg		68	40 - 140	4	30
Aniline	1670	545.3	*-	ug/Kg		33	40 - 140	11	30
Azobenzene/Diphenyldiazene	1670	871.0		ug/Kg		52	40 - 140	2	30
Benzidine	1670	391.4	J *-	ug/Kg		23	40 - 140	2	30
Benzoic acid	1670	392.4	*-	ug/Kg		24	30 - 130	12	30
Benzyl alcohol	1670	1052		ug/Kg		63	40 - 140	2	30
Bis(2-chloroethoxy)methane	1670	1011		ug/Kg		61	40 - 140	4	30
Bis(2-chloroethyl)ether	1670	1081		ug/Kg		65	40 - 140	3	30
bis (2-chloroisopropyl) ether	1670	972.2		ug/Kg		58	40 - 140	3	30
Bis(2-ethylhexyl) phthalate	1670	1465		ug/Kg		88	40 - 140	5	30
Butyl benzyl phthalate	1670	1454		ug/Kg		87	40 - 140	4	30
Carbazole	1670	987.3		ug/Kg		59	40 - 140	4	30
Dibenzofuran	1670	1342		ug/Kg		81	40 - 140	1	30
Diethyl phthalate	1670	1398		ug/Kg		84	40 - 140	2	30
Dimethyl phthalate	1670	1360		ug/Kg		82	40 - 140	0	30
Di-n-butyl phthalate	1670	1404		ug/Kg		84	40 - 140	2	30
Di-n-octyl phthalate	1670	1511		ug/Kg		91	40 - 140	5	30
Hexachlorobenzene	1670	1372		ug/Kg		82	40 - 140	1	30
Hexachlorobutadiene	1670	945.1		ug/Kg		57	40 - 140	6	30
Hexachlorocyclopentadiene	1670	956.8		ug/Kg		57	40 - 140	2	30
Hexachloroethane	1670	1065		ug/Kg		64	40 - 140	5	30
Isophorone	1670	990.8		ug/Kg		59	40 - 140	5	30
Nitrobenzene	1670	1108		ug/Kg		66	40 - 140	5	30
N-Nitrosodimethylamine	1670	813.7		ug/Kg		49	40 - 140	1	30
N-Nitrosodi-n-propylamine	1670	1218		ug/Kg		73	40 - 140	1	30
N-Nitrosodiphenylamine	1670	1454		ug/Kg		87	40 - 140	0	30
Pentachloronitrobenzene	1670	1494		ug/Kg		90	40 - 140	1	30
Pentachlorophenol	1670	1098		ug/Kg		66	30 - 130	3	30
Phenol	1670	1189		ug/Kg		71	40 - 140	1	30
Pyridine	1670	550.5	*-	ug/Kg		33	40 - 140	6	30

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
2-Fluorobiphenyl (Surr)	73		30 - 130
2-Fluorophenol (Surr)	75		15 - 110
Nitrobenzene-d5 (Surr)	68		30 - 130
Phenol-d5 (Surr)	75		15 - 110
2,4,6-Tribromophenol (Surr)	79		15 - 110
Terphenyl-d14 (Surr)	85		30 - 130

Eurofins New England

QC Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Lab Sample ID: MB 620-32927/1-A

Matrix: Solid

Analysis Batch: 32952

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 32927

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		16.0	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Acenaphthylene	ND		16.0	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
1-Methylnaphthalene	ND		16.0	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Anthracene	ND		16.0	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Benzo[a]anthracene	ND		16.0	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Benzo[a]pyrene	ND		16.0	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Benzo[b]fluoranthene	ND		16.0	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Benzo[g,h,i]perylene	ND		16.0	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Benzo[k]fluoranthene	ND		16.0	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Chrysene	ND		16.0	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Dibenz(a,h)anthracene	ND		16.0	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Fluoranthene	ND		16.0	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Fluorene	ND		16.0	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Indeno[1,2,3-cd]pyrene	ND		16.0	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
2-Methylnaphthalene	ND		16.0	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Naphthalene	ND		16.0	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Phenanthrene	ND		16.0	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Pyrene	ND		16.0	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Bis(2-ethylhexyl) phthalate	ND		33.3	ug/Kg		03/21/24 08:36	03/21/24 13:46	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	55		30 - 130	03/21/24 08:36	03/21/24 13:46	1
Terphenyl-d14 (Surr)	86		30 - 130	03/21/24 08:36	03/21/24 13:46	1
2-Fluorobiphenyl (Surr)	57		30 - 130	03/21/24 08:36	03/21/24 13:46	1

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

Lab Sample ID: MB 620-32878/1-A

Matrix: Solid

Analysis Batch: 32965

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 32878

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TEPH (C9-C36)	ND		13.3	mg/Kg		03/19/24 17:07	03/21/24 13:42	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane (Surr)	58		40 - 140	03/19/24 17:07	03/21/24 13:42	1
o-Terphenyl (Surr)	55		40 - 140	03/19/24 17:07	03/21/24 13:42	1

Lab Sample ID: LCS 620-32878/2-A

Matrix: Solid

Analysis Batch: 32965

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 32878

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
TEPH (C9-C36)	360	274.4		mg/Kg		76	30 - 100

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctadecane (Surr)	84		40 - 140
o-Terphenyl (Surr)	79		40 - 140

Eurofins New England

QC Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

Lab Sample ID: LCSD 620-32878/3-A

Matrix: Solid

Analysis Batch: 32965

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 32878

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
TEPH (C9-C36)	360	215.3		mg/Kg		60	30 - 100	24	30
Surrogate	%Recovery	LCSD Qualifier	Limits						
1-Chlorooctadecane (Surr)	69		40 - 140						
o-Terphenyl (Surr)	64		40 - 140						

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 620-33090/1-A

Matrix: Solid

Analysis Batch: 33178

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 33090

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		1.50	mg/Kg		03/26/24 08:24	03/27/24 14:42	1
Barium	ND		1.00	mg/Kg		03/26/24 08:24	03/27/24 14:42	1
Cadmium	ND		0.500	mg/Kg		03/26/24 08:24	03/27/24 14:42	1
Chromium	ND		1.00	mg/Kg		03/26/24 08:24	03/27/24 14:42	1
Lead	ND		1.50	mg/Kg		03/26/24 08:24	03/27/24 14:42	1
Selenium	ND		1.50	mg/Kg		03/26/24 08:24	03/27/24 14:42	1
Silver	ND		1.50	mg/Kg		03/26/24 08:24	03/27/24 14:42	1

Lab Sample ID: LCSSRM 620-33090/2-A

Matrix: Solid

Analysis Batch: 33178

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 33090

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	223	189.0		mg/Kg		84.8	70.4 - 102.2
Barium	445	462.6		mg/Kg		104.0	78.0 - 110.8
Cadmium	226	235.6		mg/Kg		104.3	73.9 - 104.9
Chromium	230	206.4		mg/Kg		89.7	73.5 - 107.0
Lead	275	266.9		mg/Kg		97.1	74.2 - 108.0
Selenium	137	127.0		mg/Kg		92.7	70.9 - 108.8
Silver	75.3	58.60		mg/Kg		77.8	72.0 - 110.1

Lab Sample ID: 620-17450-7 MS

Matrix: Solid

Analysis Batch: 33178

Client Sample ID: Comp (0-5)

Prep Type: Total/NA

Prep Batch: 33090

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	ND	F1	100	75.72	F1	mg/Kg	⊛	73	75 - 125
Cadmium	ND		100	79.83		mg/Kg	⊛	80	75 - 125
Chromium	13.6	F1	100	86.58	F1	mg/Kg	⊛	73	75 - 125
Lead	21.0		100	98.74		mg/Kg	⊛	78	75 - 125
Selenium	ND	F1	100	72.55	F1	mg/Kg	⊛	73	75 - 125

Eurofins New England

QC Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: 6010D - Metals (ICP) (Continued)

Lab Sample ID: 620-17450-7 MS

Matrix: Solid

Analysis Batch: 33178

Client Sample ID: Comp (0-5)

Prep Type: Total/NA

Prep Batch: 33090

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	ND	F1	100	46.65	F1	mg/Kg	✱	47	75 - 125

Lab Sample ID: 620-17450-7 MSD

Matrix: Solid

Analysis Batch: 33178

Client Sample ID: Comp (0-5)

Prep Type: Total/NA

Prep Batch: 33090

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Arsenic	ND	F1	92.8	85.32		mg/Kg	✱	89	75 - 125	12	20
Barium	45.9		92.8	147.8		mg/Kg	✱	110	75 - 125	6	20
Cadmium	ND		92.8	88.13		mg/Kg	✱	95	75 - 125	10	20
Chromium	13.6	F1	92.8	95.99		mg/Kg	✱	89	75 - 125	10	20
Lead	21.0		92.8	101.7		mg/Kg	✱	87	75 - 125	3	20
Selenium	ND	F1	92.8	80.90		mg/Kg	✱	87	75 - 125	11	20
Silver	ND	F1	92.9	44.43	F1	mg/Kg	✱	48	75 - 125	5	20

Lab Sample ID: 620-17450-7 DU

Matrix: Solid

Analysis Batch: 33178

Client Sample ID: Comp (0-5)

Prep Type: Total/NA

Prep Batch: 33090

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Arsenic	ND	F1	ND		mg/Kg	✱	NC	20
Cadmium	ND		ND		mg/Kg	✱	NC	20
Chromium	13.6	F1	12.73		mg/Kg	✱	7	20
Lead	21.0		25.81		mg/Kg	✱	20	20
Selenium	ND	F1	ND		mg/Kg	✱	NC	20
Silver	ND	F1	ND		mg/Kg	✱	NC	20

Lab Sample ID: MB 620-33121/1-A

Matrix: Solid

Analysis Batch: 33178

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 33121

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0150	mg/L		03/26/24 15:40	03/27/24 13:11	1

Lab Sample ID: LCS 620-33121/2-A

Matrix: Solid

Analysis Batch: 33178

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 33121

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	2.00	1.976		mg/L		99	80 - 120

Lab Sample ID: LB 620-32864/1-B

Matrix: Solid

Analysis Batch: 33178

Client Sample ID: Method Blank

Prep Type: TCLP

Prep Batch: 33121

Analyte	LB Result	LB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0150	mg/L		03/26/24 15:40	03/27/24 13:59	1

Eurofins New England

QC Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: 6010D - Metals (ICP) (Continued)

Lab Sample ID: 620-17450-8 MS
Matrix: Solid
Analysis Batch: 33178

Client Sample ID: Comp (5-10)
Prep Type: TCLP
Prep Batch: 33121

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Lead	ND		2.00	1.724		mg/L		86	75 - 125		

Lab Sample ID: 620-17450-8 MSD
Matrix: Solid
Analysis Batch: 33178

Client Sample ID: Comp (5-10)
Prep Type: TCLP
Prep Batch: 33121

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lead	ND		2.00	1.767		mg/L		88	75 - 125	2	20

Lab Sample ID: 620-17450-8 DU
Matrix: Solid
Analysis Batch: 33178

Client Sample ID: Comp (5-10)
Prep Type: TCLP
Prep Batch: 33121

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Lead	ND			ND		mg/L				NC	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 620-32865/1-A
Matrix: Solid
Analysis Batch: 32883

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 32865

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0500	mg/Kg		03/19/24 11:28	03/19/24 15:14	1

Lab Sample ID: LCSSRM 620-32865/2-A ^20
Matrix: Solid
Analysis Batch: 32883

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 32865

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	25.5	22.86		mg/Kg		89.6	71.4 - 125.1		

Method: 1010A - Ignitability, Pensky-Martens Closed-Cup Method

Lab Sample ID: LCS 410-485688/1
Matrix: Solid
Analysis Batch: 485688

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Flashpoint	81.0	80.00		Degrees F		99	96.9 - 103.1		

Lab Sample ID: LCSD 410-485688/2
Matrix: Solid
Analysis Batch: 485688

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Flashpoint	81.0	79.00		Degrees F		98	96.9 - 103.1	1	4

Eurofins New England

QC Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: 9012 - Cyanide, Reactive

Lab Sample ID: MB 410-486607/1-A

Matrix: Solid

Analysis Batch: 486903

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 486607

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Reactive	ND		60.0	mg/Kg		03/25/24 08:25	03/25/24 16:36	1

Lab Sample ID: LCS 410-486607/2-A

Matrix: Solid

Analysis Batch: 486903

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 486607

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Reactive	1000	ND		mg/Kg		3	0 - 5.14

Lab Sample ID: LCSD 410-486607/3-A

Matrix: Solid

Analysis Batch: 486903

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 486607

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Cyanide, Reactive	1000	ND		mg/Kg		3	0 - 5.14	11	11

Method: 9034 - Sulfide, Reactive

Lab Sample ID: MB 410-486607/1-A

Matrix: Solid

Analysis Batch: 486731

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 486607

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide, Reactive	ND		160	mg/Kg		03/25/24 08:25	03/25/24 12:45	1

Lab Sample ID: LCS 410-486607/26-A

Matrix: Solid

Analysis Batch: 486731

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 486607

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide, Reactive	538	394.3		mg/Kg		73	62 - 104

Lab Sample ID: LCSD 410-486607/27-A

Matrix: Solid

Analysis Batch: 486731

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 486607

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Sulfide, Reactive	538	404.2		mg/Kg		75	62 - 104	2	21

Method: 9045D - pH

Lab Sample ID: LCDSRM 620-33213/6

Matrix: Solid

Analysis Batch: 33213

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
pH	6.00	6.1		SU		100.8	97.5 - 102.5	1	5

Eurofins New England

QC Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: 9045D - pH (Continued)

Lab Sample ID: LCSSRM 620-33213/5

Matrix: Solid

Analysis Batch: 33213

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
pH	6.00	6.0		SU		100.2	97.5 - 102.5

Lab Sample ID: MB 620-33195/1-A

Matrix: Solid

Analysis Batch: 33213

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.6			SU			03/28/24 11:32	1
Temperature	23.4			Degrees C			03/28/24 11:32	1

Lab Sample ID: 620-17450-7 DU

Matrix: Solid

Analysis Batch: 33213

Client Sample ID: Comp (0-5)

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	8.4		8.6		SU		2	5
Temperature	23.4		23.4		Degrees C		0	5

Method: 9060 - Organic Carbon, Total (TOC)

Lab Sample ID: MB 410-485914/4

Matrix: Solid

Analysis Batch: 485914

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	ND		300	mg/Kg			03/21/24 12:15	1

Lab Sample ID: LCS 410-485914/3

Matrix: Solid

Analysis Batch: 485914

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon	3920	4950		mg/Kg		126	36 - 163

Lab Sample ID: 620-17450-7 MS

Matrix: Solid

Analysis Batch: 485914

Client Sample ID: Comp (0-5)

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon	4780	F1	177000	24340	F1	mg/Kg		11	36 - 163

Lab Sample ID: 620-17450-7 MSD

Matrix: Solid

Analysis Batch: 485914

Client Sample ID: Comp (0-5)

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Organic Carbon	4780	F1	17500	23530		mg/Kg		107	36 - 163	3	20

Eurofins New England

QC Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: SM 2510B - Conductivity, Specific Conductance

Lab Sample ID: LCDSRM 620-33209/3
Matrix: Solid
Analysis Batch: 33209

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Specific Conductance	1410	1405		uS/cm		99.4	95.0 - 105.0	0	20

Lab Sample ID: LCSSRM 620-33209/2
Matrix: Solid
Analysis Batch: 33209

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Specific Conductance	1410	1402		uS/cm		99.2	95.0 - 105.0	0	

Lab Sample ID: MB 620-33195/1-A
Matrix: Solid
Analysis Batch: 33209

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	ND		10.0	uS/cm			03/28/24 11:04	1

Lab Sample ID: 620-17450-7 DU
Matrix: Solid
Analysis Batch: 33209

Client Sample ID: Comp (0-5)
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Specific Conductance	1200		1171		uS/cm		2	5

QC Association Summary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

GC/MS VOA

Pre Prep Batch: 32834

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-1	ATC-3 (0-5)	Total/NA	Solid	Frozen Preserve	
620-17450-2	ATC-3 (5-10)	Total/NA	Solid	Frozen Preserve	
620-17450-3	ATC-2 (0-5)	Total/NA	Solid	Frozen Preserve	
620-17450-4	ATC-2 (5-10)	Total/NA	Solid	Frozen Preserve	
620-17450-5	ATC-1 (0-5)	Total/NA	Solid	Frozen Preserve	
620-17450-6	ATC-1 (5-10)	Total/NA	Solid	Frozen Preserve	
620-17450-9	ATC-8 (0-5)	Total/NA	Solid	Frozen Preserve	
620-17450-10	ATC-8 (5-10)	Total/NA	Solid	Frozen Preserve	
620-17450-11	ATC-7 (0-5)	Total/NA	Solid	Frozen Preserve	
620-17450-12	ATC-7 (5-10)	Total/NA	Solid	Frozen Preserve	
620-17450-13	ATC-6 (0-5)	Total/NA	Solid	Frozen Preserve	
620-17450-14	ATC-6 (5-10)	Total/NA	Solid	Frozen Preserve	
620-17450-15	ATC-4 (0-5)	Total/NA	Solid	Frozen Preserve	
620-17450-16	ATC-4 (5-10)	Total/NA	Solid	Frozen Preserve	
620-17450-17	ATC-5 (0-5)	Total/NA	Solid	Frozen Preserve	
620-17450-18	ATC-5 (5-10)	Total/NA	Solid	Frozen Preserve	

Prep Batch: 33086

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-1	ATC-3 (0-5)	Total/NA	Solid	5035	32834
620-17450-2	ATC-3 (5-10)	Total/NA	Solid	5035	32834
620-17450-3	ATC-2 (0-5)	Total/NA	Solid	5035	32834
620-17450-4	ATC-2 (5-10)	Total/NA	Solid	5035	32834
620-17450-5	ATC-1 (0-5)	Total/NA	Solid	5035	32834
620-17450-6	ATC-1 (5-10)	Total/NA	Solid	5035	32834
620-17450-9	ATC-8 (0-5)	Total/NA	Solid	5035	32834
620-17450-10	ATC-8 (5-10)	Total/NA	Solid	5035	32834
620-17450-11	ATC-7 (0-5)	Total/NA	Solid	5035	32834
620-17450-12	ATC-7 (5-10)	Total/NA	Solid	5035	32834
620-17450-13	ATC-6 (0-5)	Total/NA	Solid	5035	32834
620-17450-14	ATC-6 (5-10)	Total/NA	Solid	5035	32834
620-17450-15	ATC-4 (0-5)	Total/NA	Solid	5035	32834
620-17450-16	ATC-4 (5-10)	Total/NA	Solid	5035	32834
620-17450-17	ATC-5 (0-5)	Total/NA	Solid	5035	32834
620-17450-18	ATC-5 (5-10)	Total/NA	Solid	5035	32834
MB 620-33086/3-A	Method Blank	Total/NA	Solid	5035	
LCS 620-33086/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 620-33086/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Eurofins New England

QC Association Summary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

GC/MS VOA

Analysis Batch: 33087

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-1	ATC-3 (0-5)	Total/NA	Solid	8260C	33086
620-17450-2	ATC-3 (5-10)	Total/NA	Solid	8260C	33086
620-17450-3	ATC-2 (0-5)	Total/NA	Solid	8260C	33086
620-17450-4	ATC-2 (5-10)	Total/NA	Solid	8260C	33086
620-17450-5	ATC-1 (0-5)	Total/NA	Solid	8260C	33086
620-17450-6	ATC-1 (5-10)	Total/NA	Solid	8260C	33086
620-17450-9	ATC-8 (0-5)	Total/NA	Solid	8260C	33086
620-17450-10	ATC-8 (5-10)	Total/NA	Solid	8260C	33086
620-17450-11	ATC-7 (0-5)	Total/NA	Solid	8260C	33086
620-17450-12	ATC-7 (5-10)	Total/NA	Solid	8260C	33086
620-17450-13	ATC-6 (0-5)	Total/NA	Solid	8260C	33086
620-17450-14	ATC-6 (5-10)	Total/NA	Solid	8260C	33086
620-17450-15	ATC-4 (0-5)	Total/NA	Solid	8260C	33086
620-17450-16	ATC-4 (5-10)	Total/NA	Solid	8260C	33086
620-17450-17	ATC-5 (0-5)	Total/NA	Solid	8260C	33086
620-17450-18	ATC-5 (5-10)	Total/NA	Solid	8260C	33086
MB 620-33086/3-A	Method Blank	Total/NA	Solid	8260C	33086
LCS 620-33086/1-A	Lab Control Sample	Total/NA	Solid	8260C	33086
LCSD 620-33086/2-A	Lab Control Sample Dup	Total/NA	Solid	8260C	33086

GC/MS Semi VOA

Prep Batch: 32927

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	Total/NA	Solid	3546	
620-17450-8	Comp (5-10)	Total/NA	Solid	3546	
MB 620-32927/1-A	Method Blank	Total/NA	Solid	3546	
LCS 620-32927/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 620-32927/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	

Analysis Batch: 32951

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	Total/NA	Solid	8270D	32927
620-17450-8	Comp (5-10)	Total/NA	Solid	8270D	32927
MB 620-32927/1-A	Method Blank	Total/NA	Solid	8270D	32927
LCS 620-32927/2-A	Lab Control Sample	Total/NA	Solid	8270D	32927
LCSD 620-32927/3-A	Lab Control Sample Dup	Total/NA	Solid	8270D	32927

Analysis Batch: 32952

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	Total/NA	Solid	8270D_LL_PAH	32927
620-17450-8	Comp (5-10)	Total/NA	Solid	8270D_LL_PAH	32927
MB 620-32927/1-A	Method Blank	Total/NA	Solid	8270D_LL_PAH	32927

GC Semi VOA

Prep Batch: 32873

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	Total/NA	Solid	3540C	
620-17450-8	Comp (5-10)	Total/NA	Solid	3540C	

Eurofins New England

QC Association Summary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

GC Semi VOA

Prep Batch: 32878

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	Total/NA	Solid	3546	
620-17450-8	Comp (5-10)	Total/NA	Solid	3546	
MB 620-32878/1-A	Method Blank	Total/NA	Solid	3546	
LCS 620-32878/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 620-32878/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	

Analysis Batch: 32965

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	Total/NA	Solid	8100	32878
620-17450-8	Comp (5-10)	Total/NA	Solid	8100	32878
MB 620-32878/1-A	Method Blank	Total/NA	Solid	8100	32878
LCS 620-32878/2-A	Lab Control Sample	Total/NA	Solid	8100	32878
LCSD 620-32878/3-A	Lab Control Sample Dup	Total/NA	Solid	8100	32878

Analysis Batch: 32987

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	Total/NA	Solid	8082	32873
620-17450-8	Comp (5-10)	Total/NA	Solid	8082	32873

Metals

Leach Batch: 32864

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	TCLP	Solid	1311	
620-17450-8	Comp (5-10)	TCLP	Solid	1311	
LB 620-32864/1-B	Method Blank	TCLP	Solid	1311	
620-17450-8 MS	Comp (5-10)	TCLP	Solid	1311	
620-17450-8 MSD	Comp (5-10)	TCLP	Solid	1311	
620-17450-8 DU	Comp (5-10)	TCLP	Solid	1311	

Prep Batch: 32865

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	Total/NA	Solid	7471B	
620-17450-8	Comp (5-10)	Total/NA	Solid	7471B	
MB 620-32865/1-A	Method Blank	Total/NA	Solid	7471B	
LCSSRM 620-32865/2-A ^20	Lab Control Sample	Total/NA	Solid	7471B	

Analysis Batch: 32883

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	Total/NA	Solid	7471A	32865
620-17450-8	Comp (5-10)	Total/NA	Solid	7471A	32865
MB 620-32865/1-A	Method Blank	Total/NA	Solid	7471A	32865
LCSSRM 620-32865/2-A ^20	Lab Control Sample	Total/NA	Solid	7471A	32865

Prep Batch: 33090

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	Total/NA	Solid	3050B	
620-17450-8	Comp (5-10)	Total/NA	Solid	3050B	
MB 620-33090/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 620-33090/2-A	Lab Control Sample	Total/NA	Solid	3050B	
620-17450-7 MS	Comp (0-5)	Total/NA	Solid	3050B	

Eurofins New England

QC Association Summary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Metals (Continued)

Prep Batch: 33090 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7 MSD	Comp (0-5)	Total/NA	Solid	3050B	
620-17450-7 DU	Comp (0-5)	Total/NA	Solid	3050B	

Prep Batch: 33121

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	TCLP	Solid	3010A	32864
620-17450-8	Comp (5-10)	TCLP	Solid	3010A	32864
LB 620-32864/1-B	Method Blank	TCLP	Solid	3010A	32864
MB 620-33121/1-A	Method Blank	Total/NA	Solid	3010A	
LCS 620-33121/2-A	Lab Control Sample	Total/NA	Solid	3010A	
620-17450-8 MS	Comp (5-10)	TCLP	Solid	3010A	32864
620-17450-8 MSD	Comp (5-10)	TCLP	Solid	3010A	32864
620-17450-8 DU	Comp (5-10)	TCLP	Solid	3010A	32864

Analysis Batch: 33178

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	TCLP	Solid	6010D	33121
620-17450-7	Comp (0-5)	Total/NA	Solid	6010D	33090
620-17450-8	Comp (5-10)	TCLP	Solid	6010D	33121
620-17450-8	Comp (5-10)	Total/NA	Solid	6010D	33090
LB 620-32864/1-B	Method Blank	TCLP	Solid	6010D	33121
MB 620-33090/1-A	Method Blank	Total/NA	Solid	6010D	33090
MB 620-33121/1-A	Method Blank	Total/NA	Solid	6010D	33121
LCS 620-33121/2-A	Lab Control Sample	Total/NA	Solid	6010D	33121
LCSSRM 620-33090/2-A	Lab Control Sample	Total/NA	Solid	6010D	33090
620-17450-7 MS	Comp (0-5)	Total/NA	Solid	6010D	33090
620-17450-7 MSD	Comp (0-5)	Total/NA	Solid	6010D	33090
620-17450-8 MS	Comp (5-10)	TCLP	Solid	6010D	33121
620-17450-8 MSD	Comp (5-10)	TCLP	Solid	6010D	33121
620-17450-7 DU	Comp (0-5)	Total/NA	Solid	6010D	33090
620-17450-8 DU	Comp (5-10)	TCLP	Solid	6010D	33121

General Chemistry

Analysis Batch: 32837

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-1	ATC-3 (0-5)	Total/NA	Solid	Moisture	
620-17450-2	ATC-3 (5-10)	Total/NA	Solid	Moisture	
620-17450-3	ATC-2 (0-5)	Total/NA	Solid	Moisture	
620-17450-4	ATC-2 (5-10)	Total/NA	Solid	Moisture	
620-17450-5	ATC-1 (0-5)	Total/NA	Solid	Moisture	
620-17450-6	ATC-1 (5-10)	Total/NA	Solid	Moisture	
620-17450-7	Comp (0-5)	Total/NA	Solid	Moisture	
620-17450-8	Comp (5-10)	Total/NA	Solid	Moisture	
620-17450-9	ATC-8 (0-5)	Total/NA	Solid	Moisture	
620-17450-10	ATC-8 (5-10)	Total/NA	Solid	Moisture	
620-17450-11	ATC-7 (0-5)	Total/NA	Solid	Moisture	
620-17450-12	ATC-7 (5-10)	Total/NA	Solid	Moisture	
620-17450-13	ATC-6 (0-5)	Total/NA	Solid	Moisture	
620-17450-14	ATC-6 (5-10)	Total/NA	Solid	Moisture	
MB 620-32837/1	Method Blank	Total/NA	Solid	Moisture	

Eurofins New England

QC Association Summary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

General Chemistry (Continued)

Analysis Batch: 32837 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-8 DU	Comp (5-10)	Total/NA	Solid	Moisture	

Analysis Batch: 32858

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-15	ATC-4 (0-5)	Total/NA	Solid	Moisture	
620-17450-16	ATC-4 (5-10)	Total/NA	Solid	Moisture	
620-17450-17	ATC-5 (0-5)	Total/NA	Solid	Moisture	
620-17450-18	ATC-5 (5-10)	Total/NA	Solid	Moisture	
MB 620-32858/1	Method Blank	Total/NA	Solid	Moisture	
620-17450-15 DU	ATC-4 (0-5)	Total/NA	Solid	Moisture	

Leach Batch: 33195

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	Soluble	Solid	DI Leach	
620-17450-8	Comp (5-10)	Soluble	Solid	DI Leach	
MB 620-33195/1-A	Method Blank	Soluble	Solid	DI Leach	
620-17450-7 DU	Comp (0-5)	Soluble	Solid	DI Leach	

Analysis Batch: 33209

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	Soluble	Solid	SM 2510B	33195
620-17450-8	Comp (5-10)	Soluble	Solid	SM 2510B	33195
MB 620-33195/1-A	Method Blank	Soluble	Solid	SM 2510B	33195
LCDSRM 620-33209/3	Lab Control Sample Dup	Total/NA	Solid	SM 2510B	
LCSSRM 620-33209/2	Lab Control Sample	Total/NA	Solid	SM 2510B	
620-17450-7 DU	Comp (0-5)	Soluble	Solid	SM 2510B	33195

Analysis Batch: 33213

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	Soluble	Solid	9045D	33195
620-17450-8	Comp (5-10)	Soluble	Solid	9045D	33195
MB 620-33195/1-A	Method Blank	Soluble	Solid	9045D	33195
LCDSRM 620-33213/6	Lab Control Sample Dup	Total/NA	Solid	9045D	
LCSSRM 620-33213/5	Lab Control Sample	Total/NA	Solid	9045D	
620-17450-7 DU	Comp (0-5)	Soluble	Solid	9045D	33195

Analysis Batch: 485688

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	Total/NA	Solid	1010A	
620-17450-8	Comp (5-10)	Total/NA	Solid	1010A	
LCS 410-485688/1	Lab Control Sample	Total/NA	Solid	1010A	
LCSD 410-485688/2	Lab Control Sample Dup	Total/NA	Solid	1010A	

Analysis Batch: 485914

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	Total/NA	Solid	9060	
620-17450-8	Comp (5-10)	Total/NA	Solid	9060	
MB 410-485914/4	Method Blank	Total/NA	Solid	9060	
LCS 410-485914/3	Lab Control Sample	Total/NA	Solid	9060	
620-17450-7 MS	Comp (0-5)	Total/NA	Solid	9060	
620-17450-7 MSD	Comp (0-5)	Total/NA	Solid	9060	

Eurofins New England

QC Association Summary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

General Chemistry

Prep Batch: 486607

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	Total/NA	Solid	7.3.4	
620-17450-8	Comp (5-10)	Total/NA	Solid	7.3.4	
MB 410-486607/1-A	Method Blank	Total/NA	Solid	7.3.4	
LCS 410-486607/26-A	Lab Control Sample	Total/NA	Solid	7.3.4	
LCS 410-486607/2-A	Lab Control Sample	Total/NA	Solid	7.3.4	
LCSD 410-486607/27-A	Lab Control Sample Dup	Total/NA	Solid	7.3.4	
LCSD 410-486607/3-A	Lab Control Sample Dup	Total/NA	Solid	7.3.4	

Analysis Batch: 486731

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	Total/NA	Solid	9034	486607
620-17450-8	Comp (5-10)	Total/NA	Solid	9034	486607
MB 410-486607/1-A	Method Blank	Total/NA	Solid	9034	486607
LCS 410-486607/26-A	Lab Control Sample	Total/NA	Solid	9034	486607
LCSD 410-486607/27-A	Lab Control Sample Dup	Total/NA	Solid	9034	486607

Analysis Batch: 486903

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	Total/NA	Solid	9012	486607
620-17450-8	Comp (5-10)	Total/NA	Solid	9012	486607
MB 410-486607/1-A	Method Blank	Total/NA	Solid	9012	486607
LCS 410-486607/2-A	Lab Control Sample	Total/NA	Solid	9012	486607
LCSD 410-486607/3-A	Lab Control Sample Dup	Total/NA	Solid	9012	486607

Lab Chronicle

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-3 (0-5)

Date Collected: 03/15/24 09:10

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	32837	MEM	EET NE	03/19/24 07:42

Client Sample ID: ATC-3 (0-5)

Date Collected: 03/15/24 09:10

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-1

Matrix: Solid

Percent Solids: 88.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	Frozen Preserve			32834	KFS	EET NE	03/15/24 15:00
Total/NA	Prep	5035			33086	CLR	EET NE	03/26/24 07:37
Total/NA	Analysis	8260C		1	33087	CLR	EET NE	03/26/24 12:08

Client Sample ID: ATC-3 (5-10)

Date Collected: 03/15/24 09:30

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	32837	MEM	EET NE	03/19/24 07:42

Client Sample ID: ATC-3 (5-10)

Date Collected: 03/15/24 09:30

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-2

Matrix: Solid

Percent Solids: 87.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	Frozen Preserve			32834	KFS	EET NE	03/15/24 15:00
Total/NA	Prep	5035			33086	CLR	EET NE	03/26/24 07:37
Total/NA	Analysis	8260C		1	33087	CLR	EET NE	03/26/24 12:33

Client Sample ID: ATC-2 (0-5)

Date Collected: 03/15/24 10:15

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	32837	MEM	EET NE	03/19/24 07:42

Client Sample ID: ATC-2 (0-5)

Date Collected: 03/15/24 10:15

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-3

Matrix: Solid

Percent Solids: 90.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	Frozen Preserve			32834	KFS	EET NE	03/15/24 15:00
Total/NA	Prep	5035			33086	CLR	EET NE	03/26/24 07:37
Total/NA	Analysis	8260C		1	33087	CLR	EET NE	03/26/24 12:58

Lab Chronicle

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-2 (5-10)

Date Collected: 03/15/24 11:00

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	32837	MEM	EET NE	03/19/24 07:42

Client Sample ID: ATC-2 (5-10)

Date Collected: 03/15/24 11:00

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-4

Matrix: Solid

Percent Solids: 77.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	Frozen Preserve			32834	KFS	EET NE	03/15/24 15:00
Total/NA	Prep	5035			33086	CLR	EET NE	03/26/24 07:37
Total/NA	Analysis	8260C		1	33087	CLR	EET NE	03/26/24 13:23

Client Sample ID: ATC-1 (0-5)

Date Collected: 03/15/24 11:20

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	32837	MEM	EET NE	03/19/24 07:42

Client Sample ID: ATC-1 (0-5)

Date Collected: 03/15/24 11:20

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-5

Matrix: Solid

Percent Solids: 88.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	Frozen Preserve			32834	KFS	EET NE	03/15/24 15:00
Total/NA	Prep	5035			33086	CLR	EET NE	03/26/24 07:37
Total/NA	Analysis	8260C		1	33087	CLR	EET NE	03/26/24 13:49

Client Sample ID: ATC-1 (5-10)

Date Collected: 03/15/24 11:30

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-6

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	32837	MEM	EET NE	03/19/24 07:42

Client Sample ID: ATC-1 (5-10)

Date Collected: 03/15/24 11:30

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-6

Matrix: Solid

Percent Solids: 91.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	Frozen Preserve			32834	KFS	EET NE	03/15/24 15:00
Total/NA	Prep	5035			33086	CLR	EET NE	03/26/24 07:37
Total/NA	Analysis	8260C		1	33087	CLR	EET NE	03/26/24 14:14

Eurofins New England

Lab Chronicle

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: Comp (0-5)

Date Collected: 03/15/24 12:00

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
TCLP	Leach	1311			32864	MEM	EET NE	03/19/24 10:35 - 03/20/24 09:30 ¹
TCLP	Prep	3010A			33121	JPC	EET NE	03/26/24 15:40
TCLP	Analysis	6010D		1	33178	JPC	EET NE	03/27/24 13:47
Total/NA	Analysis	1010A		1	485688	USAE	ELLE	03/21/24 10:01 - 03/21/24 10:01 ¹
Total/NA	Prep	7.3.4			486607	USE1	ELLE	03/25/24 08:25
Total/NA	Analysis	9012		1	486903	JCG7	ELLE	03/25/24 17:06
Total/NA	Prep	7.3.4			486607	USE1	ELLE	03/25/24 08:25
Total/NA	Analysis	9034		1	486731	USE1	ELLE	03/25/24 12:45
Soluble	Leach	DI Leach			33195	ODO	EET NE	03/28/24 10:08
Soluble	Analysis	9045D		1	33213	ODO	EET NE	03/28/24 11:32
Total/NA	Analysis	9060		1	485914	P684	ELLE	03/21/24 13:08
Total/NA	Analysis	Moisture		1	32837	MEM	EET NE	03/19/24 07:42
Soluble	Leach	DI Leach			33195	ODO	EET NE	03/28/24 10:08
Soluble	Analysis	SM 2510B		1	33209	ODO	EET NE	03/28/24 11:04

Client Sample ID: Comp (0-5)

Date Collected: 03/15/24 12:00

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-7

Matrix: Solid

Percent Solids: 87.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3546			32927	JAC	EET NE	03/21/24 08:36
Total/NA	Analysis	8270D		1	32951	JS	EET NE	03/21/24 15:49
Total/NA	Prep	3546			32927	JAC	EET NE	03/21/24 08:36
Total/NA	Analysis	8270D_LL_PAH		1	32952	JS	EET NE	03/21/24 15:49
Total/NA	Prep	3540C			32873	JAC	EET NE	03/19/24 14:48
Total/NA	Analysis	8082		1	32987	BMH	EET NE	03/21/24 23:56
Total/NA	Prep	3546			32878	JAC	EET NE	03/19/24 17:07
Total/NA	Analysis	8100		1	32965	JS	EET NE	03/21/24 15:35
Total/NA	Prep	3050B			33090	PRB	EET NE	03/26/24 08:24
Total/NA	Analysis	6010D		2	33178	JPC	EET NE	03/27/24 14:54
Total/NA	Prep	7471B			32865	PRB	EET NE	03/19/24 11:28
Total/NA	Analysis	7471A		1	32883	PRB	EET NE	03/19/24 15:44

Client Sample ID: Comp (5-10)

Date Collected: 03/15/24 12:15

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-8

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
TCLP	Leach	1311			32864	MEM	EET NE	03/19/24 10:35 - 03/20/24 09:30 ¹
TCLP	Prep	3010A			33121	JPC	EET NE	03/26/24 15:40
TCLP	Analysis	6010D		1	33178	JPC	EET NE	03/27/24 13:23
Total/NA	Analysis	1010A		1	485688	USAE	ELLE	03/21/24 10:01 - 03/21/24 10:01 ¹
Total/NA	Prep	7.3.4			486607	USE1	ELLE	03/25/24 08:25
Total/NA	Analysis	9012		1	486903	JCG7	ELLE	03/25/24 17:07

Eurofins New England

Lab Chronicle

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: Comp (5-10)

Date Collected: 03/15/24 12:15

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-8

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7.3.4			486607	USE1	ELLE	03/25/24 08:25
Total/NA	Analysis	9034		1	486731	USE1	ELLE	03/25/24 12:45
Soluble	Leach	DI Leach			33195	ODO	EET NE	03/28/24 10:08
Soluble	Analysis	9045D		1	33213	ODO	EET NE	03/28/24 11:32
Total/NA	Analysis	9060		1	485914	P684	ELLE	03/21/24 13:29
Total/NA	Analysis	Moisture		1	32837	MEM	EET NE	03/19/24 07:42
Soluble	Leach	DI Leach			33195	ODO	EET NE	03/28/24 10:08
Soluble	Analysis	SM 2510B		1	33209	ODO	EET NE	03/28/24 11:04

Client Sample ID: Comp (5-10)

Date Collected: 03/15/24 12:15

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-8

Matrix: Solid

Percent Solids: 87.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3546			32927	JAC	EET NE	03/21/24 08:36
Total/NA	Analysis	8270D		1	32951	JS	EET NE	03/21/24 16:14
Total/NA	Prep	3546			32927	JAC	EET NE	03/21/24 08:36
Total/NA	Analysis	8270D_LL_PAH		1	32952	JS	EET NE	03/21/24 16:14
Total/NA	Prep	3540C			32873	JAC	EET NE	03/19/24 14:48
Total/NA	Analysis	8082		1	32987	BMH	EET NE	03/22/24 00:14
Total/NA	Prep	3546			32878	JAC	EET NE	03/19/24 17:07
Total/NA	Analysis	8100		1	32965	JS	EET NE	03/21/24 15:57
Total/NA	Prep	3050B			33090	PRB	EET NE	03/26/24 08:24
Total/NA	Analysis	6010D		2	33178	JPC	EET NE	03/27/24 15:18
Total/NA	Prep	7471B			32865	PRB	EET NE	03/19/24 11:28
Total/NA	Analysis	7471A		1	32883	PRB	EET NE	03/19/24 15:46

Client Sample ID: ATC-8 (0-5)

Date Collected: 03/14/24 10:00

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-9

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	32837	MEM	EET NE	03/19/24 07:42

Client Sample ID: ATC-8 (0-5)

Date Collected: 03/14/24 10:00

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-9

Matrix: Solid

Percent Solids: 88.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	Frozen Preserve			32834	KFS	EET NE	03/14/24 15:00
Total/NA	Prep	5035			33086	CLR	EET NE	03/26/24 07:37
Total/NA	Analysis	8260C		1	33087	CLR	EET NE	03/26/24 14:40

Eurofins New England

Lab Chronicle

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-8 (5-10)

Date Collected: 03/14/24 11:50

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-10

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	32837	MEM	EET NE	03/19/24 07:42

Client Sample ID: ATC-8 (5-10)

Date Collected: 03/14/24 11:50

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-10

Matrix: Solid

Percent Solids: 77.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	Frozen Preserve			32834	KFS	EET NE	03/14/24 15:00
Total/NA	Prep	5035			33086	CLR	EET NE	03/26/24 07:37
Total/NA	Analysis	8260C		1	33087	CLR	EET NE	03/26/24 15:06

Client Sample ID: ATC-7 (0-5)

Date Collected: 03/14/24 11:10

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-11

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	32837	MEM	EET NE	03/19/24 07:42

Client Sample ID: ATC-7 (0-5)

Date Collected: 03/14/24 11:10

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-11

Matrix: Solid

Percent Solids: 91.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	Frozen Preserve			32834	KFS	EET NE	03/14/24 15:00
Total/NA	Prep	5035			33086	CLR	EET NE	03/26/24 07:37
Total/NA	Analysis	8260C		1	33087	CLR	EET NE	03/26/24 15:31

Client Sample ID: ATC-7 (5-10)

Date Collected: 03/14/24 12:10

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-12

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	32837	MEM	EET NE	03/19/24 07:42

Client Sample ID: ATC-7 (5-10)

Date Collected: 03/14/24 12:10

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-12

Matrix: Solid

Percent Solids: 78.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	Frozen Preserve			32834	KFS	EET NE	03/14/24 15:00
Total/NA	Prep	5035			33086	CLR	EET NE	03/26/24 07:37
Total/NA	Analysis	8260C		1	33087	CLR	EET NE	03/26/24 15:57

Lab Chronicle

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-6 (0-5)

Date Collected: 03/14/24 12:30

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-13

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	32837	MEM	EET NE	03/19/24 07:42

Client Sample ID: ATC-6 (0-5)

Date Collected: 03/14/24 12:30

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-13

Matrix: Solid

Percent Solids: 89.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	Frozen Preserve			32834	KFS	EET NE	03/14/24 15:00
Total/NA	Prep	5035			33086	CLR	EET NE	03/26/24 07:37
Total/NA	Analysis	8260C		1	33087	CLR	EET NE	03/26/24 16:24

Client Sample ID: ATC-6 (5-10)

Date Collected: 03/14/24 12:45

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-14

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	32837	MEM	EET NE	03/19/24 07:42

Client Sample ID: ATC-6 (5-10)

Date Collected: 03/14/24 12:45

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-14

Matrix: Solid

Percent Solids: 92.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	Frozen Preserve			32834	KFS	EET NE	03/14/24 15:00
Total/NA	Prep	5035			33086	CLR	EET NE	03/26/24 07:37
Total/NA	Analysis	8260C		1	33087	CLR	EET NE	03/26/24 16:50

Client Sample ID: ATC-4 (0-5)

Date Collected: 03/14/24 13:40

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-15

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	32858	MEM	EET NE	03/19/24 09:21

Client Sample ID: ATC-4 (0-5)

Date Collected: 03/14/24 13:40

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-15

Matrix: Solid

Percent Solids: 89.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	Frozen Preserve			32834	KFS	EET NE	03/14/24 15:00
Total/NA	Prep	5035			33086	CLR	EET NE	03/26/24 07:37
Total/NA	Analysis	8260C		1	33087	CLR	EET NE	03/26/24 17:15

Lab Chronicle

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-4 (5-10)

Date Collected: 03/14/24 13:55

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-16

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	32858	MEM	EET NE	03/19/24 09:21

Client Sample ID: ATC-4 (5-10)

Date Collected: 03/14/24 13:55

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-16

Matrix: Solid

Percent Solids: 92.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	Frozen Preserve			32834	KFS	EET NE	03/14/24 15:00
Total/NA	Prep	5035			33086	CLR	EET NE	03/26/24 07:37
Total/NA	Analysis	8260C		1	33087	CLR	EET NE	03/26/24 17:41

Client Sample ID: ATC-5 (0-5)

Date Collected: 03/14/24 14:25

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-17

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	32858	MEM	EET NE	03/19/24 09:21

Client Sample ID: ATC-5 (0-5)

Date Collected: 03/14/24 14:25

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-17

Matrix: Solid

Percent Solids: 89.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	Frozen Preserve			32834	KFS	EET NE	03/14/24 15:00
Total/NA	Prep	5035			33086	CLR	EET NE	03/26/24 07:37
Total/NA	Analysis	8260C		1	33087	CLR	EET NE	03/26/24 18:07

Client Sample ID: ATC-5 (5-10)

Date Collected: 03/14/24 12:10

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-18

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	32858	MEM	EET NE	03/19/24 09:21

Client Sample ID: ATC-5 (5-10)

Date Collected: 03/14/24 12:10

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-18

Matrix: Solid

Percent Solids: 92.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	Frozen Preserve			32834	KFS	EET NE	03/14/24 15:00
Total/NA	Prep	5035			33086	CLR	EET NE	03/26/24 07:37
Total/NA	Analysis	8260C		1	33087	CLR	EET NE	03/26/24 18:33

¹ This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET NE = Eurofins New England, 646 Camp Ave, North Kingstown, RI 02852, TEL (413)789-9018

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Eurofins New England

Accreditation/Certification Summary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Laboratory: Eurofins New England

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Massachusetts	State	M-RI907	06-30-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
6010D	3010A	Solid	Lead
6010D	3050B	Solid	Arsenic
6010D	3050B	Solid	Barium
6010D	3050B	Solid	Cadmium
6010D	3050B	Solid	Chromium
6010D	3050B	Solid	Lead
6010D	3050B	Solid	Selenium
6010D	3050B	Solid	Silver
7471A	7471B	Solid	Mercury
8082	3540C	Solid	PCB-1016
8082	3540C	Solid	PCB-1221
8082	3540C	Solid	PCB-1232
8082	3540C	Solid	PCB-1242
8082	3540C	Solid	PCB-1248
8082	3540C	Solid	PCB-1254
8082	3540C	Solid	PCB-1260
8082	3540C	Solid	PCB-1262
8082	3540C	Solid	PCB-1268
8100	3546	Solid	TEPH (C9-C36)
8260C	5035	Solid	1,1,1,2-Tetrachloroethane
8260C	5035	Solid	1,1,1-Trichloroethane
8260C	5035	Solid	1,1,2,2-Tetrachloroethane
8260C	5035	Solid	1,1,2-Trichloroethane
8260C	5035	Solid	1,1,2-Trichlorotrifluoroethane (Freon 113)
8260C	5035	Solid	1,1-Dichloroethane
8260C	5035	Solid	1,1-Dichloroethene
8260C	5035	Solid	1,1-Dichloropropene
8260C	5035	Solid	1,2,3-Trichlorobenzene
8260C	5035	Solid	1,2,3-Trichloropropane
8260C	5035	Solid	1,2,4-Trichlorobenzene
8260C	5035	Solid	1,2,4-Trimethylbenzene
8260C	5035	Solid	1,2-Dibromo-3-Chloropropane
8260C	5035	Solid	1,2-Dibromoethane (EDB)
8260C	5035	Solid	1,2-Dichlorobenzene
8260C	5035	Solid	1,2-Dichloroethane
8260C	5035	Solid	1,2-Dichloropropane
8260C	5035	Solid	1,3,5-Trichlorobenzene
8260C	5035	Solid	1,3,5-Trimethylbenzene
8260C	5035	Solid	1,3-Dichlorobenzene
8260C	5035	Solid	1,3-Dichloropropane
8260C	5035	Solid	1,3-Dichloropropene, Total
8260C	5035	Solid	1,4-Dichlorobenzene
8260C	5035	Solid	1,4-Dioxane
8260C	5035	Solid	2,2-Dichloropropane
8260C	5035	Solid	2-Butanone (MEK)

Eurofins New England

Accreditation/Certification Summary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Laboratory: Eurofins New England (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8260C	5035	Solid	2-Chlorotoluene
8260C	5035	Solid	2-Hexanone (MBK)
8260C	5035	Solid	4-Chlorotoluene
8260C	5035	Solid	4-Isopropyltoluene
8260C	5035	Solid	4-Methyl-2-pentanone (MIBK)
8260C	5035	Solid	Acetone
8260C	5035	Solid	Acrylonitrile
8260C	5035	Solid	Benzene
8260C	5035	Solid	Bromobenzene
8260C	5035	Solid	Bromochloromethane
8260C	5035	Solid	Bromodichloromethane
8260C	5035	Solid	Bromoform
8260C	5035	Solid	Bromomethane
8260C	5035	Solid	Carbon disulfide
8260C	5035	Solid	Carbon tetrachloride
8260C	5035	Solid	Chlorobenzene
8260C	5035	Solid	Chloroethane
8260C	5035	Solid	Chloroform
8260C	5035	Solid	Chloromethane
8260C	5035	Solid	cis-1,2-Dichloroethene
8260C	5035	Solid	cis-1,3-Dichloropropene
8260C	5035	Solid	Dibromochloromethane
8260C	5035	Solid	Dibromomethane
8260C	5035	Solid	Dichlorodifluoromethane (Freon 12)
8260C	5035	Solid	di-Isopropyl ether
8260C	5035	Solid	Ethanol
8260C	5035	Solid	Ethyl ether
8260C	5035	Solid	Ethyl tert-butyl ether
8260C	5035	Solid	Ethylbenzene
8260C	5035	Solid	Hexachlorobutadiene
8260C	5035	Solid	Isopropylbenzene
8260C	5035	Solid	m,p-Xylene
8260C	5035	Solid	Methyl tert-butyl ether
8260C	5035	Solid	Methylene Chloride
8260C	5035	Solid	Naphthalene
8260C	5035	Solid	n-Butylbenzene
8260C	5035	Solid	N-Propylbenzene
8260C	5035	Solid	o-Xylene
8260C	5035	Solid	sec-Butylbenzene
8260C	5035	Solid	Styrene
8260C	5035	Solid	Tert-amyl methyl ether
8260C	5035	Solid	tert-Butanol
8260C	5035	Solid	tert-Butylbenzene
8260C	5035	Solid	Tetrachloroethene
8260C	5035	Solid	Tetrahydrofuran
8260C	5035	Solid	Toluene
8260C	5035	Solid	trans-1,2-Dichloroethene

Eurofins New England

Accreditation/Certification Summary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Laboratory: Eurofins New England (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8260C	5035	Solid	trans-1,3-Dichloropropene
8260C	5035	Solid	trans-1,4-Dichloro-2-butene
8260C	5035	Solid	Trichloroethene
8260C	5035	Solid	Trichlorofluoromethane (Freon 11)
8260C	5035	Solid	Vinyl chloride
8260C	5035	Solid	Xylenes, Total
8270D	3546	Solid	1,2,4,5-Tetrachlorobenzene
8270D	3546	Solid	1,2,4-Trichlorobenzene
8270D	3546	Solid	1,2-Dichlorobenzene
8270D	3546	Solid	1,3-Dichlorobenzene
8270D	3546	Solid	1,4-Dichlorobenzene
8270D	3546	Solid	2,4,5-Trichlorophenol
8270D	3546	Solid	2,4,6-Trichlorophenol
8270D	3546	Solid	2,4-Dichlorophenol
8270D	3546	Solid	2,4-Dimethylphenol
8270D	3546	Solid	2,4-Dinitrophenol
8270D	3546	Solid	2,4-Dinitrotoluene
8270D	3546	Solid	2,6-Dinitrotoluene
8270D	3546	Solid	2-Chloronaphthalene
8270D	3546	Solid	2-Chlorophenol
8270D	3546	Solid	2-Methylphenol
8270D	3546	Solid	2-Nitroaniline
8270D	3546	Solid	2-Nitrophenol
8270D	3546	Solid	3 & 4 Methylphenol
8270D	3546	Solid	3,3'-Dichlorobenzidine
8270D	3546	Solid	3-Nitroaniline
8270D	3546	Solid	4,6-Dinitro-2-methylphenol
8270D	3546	Solid	4-Bromophenyl phenyl ether
8270D	3546	Solid	4-Chloro-3-methylphenol
8270D	3546	Solid	4-Chloroaniline
8270D	3546	Solid	4-Chlorophenyl phenyl ether
8270D	3546	Solid	4-Nitroaniline
8270D	3546	Solid	4-Nitrophenol
8270D	3546	Solid	Acetophenone
8270D	3546	Solid	Aniline
8270D	3546	Solid	Azobenzene/Diphenyldiazene
8270D	3546	Solid	Benzidine
8270D	3546	Solid	Benzoic acid
8270D	3546	Solid	Benzyl alcohol
8270D	3546	Solid	bis (2-chloroisopropyl) ether
8270D	3546	Solid	Bis(2-chloroethoxy)methane
8270D	3546	Solid	Bis(2-chloroethyl)ether
8270D	3546	Solid	Bis(2-ethylhexyl) phthalate
8270D	3546	Solid	Butyl benzyl phthalate
8270D	3546	Solid	Carbazole
8270D	3546	Solid	Dibenzofuran
8270D	3546	Solid	Diethyl phthalate

Accreditation/Certification Summary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Laboratory: Eurofins New England (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8270D	3546	Solid	Dimethyl phthalate
8270D	3546	Solid	Di-n-butyl phthalate
8270D	3546	Solid	Di-n-octyl phthalate
8270D	3546	Solid	Hexachlorobenzene
8270D	3546	Solid	Hexachlorobutadiene
8270D	3546	Solid	Hexachlorocyclopentadiene
8270D	3546	Solid	Hexachloroethane
8270D	3546	Solid	Isophorone
8270D	3546	Solid	Nitrobenzene
8270D	3546	Solid	N-Nitrosodimethylamine
8270D	3546	Solid	N-Nitrosodi-n-propylamine
8270D	3546	Solid	N-Nitrosodiphenylamine
8270D	3546	Solid	Pentachloronitrobenzene
8270D	3546	Solid	Pentachlorophenol
8270D	3546	Solid	Phenol
8270D	3546	Solid	Pyridine
8270D_LL_PAH	3546	Solid	1-Methylnaphthalene
8270D_LL_PAH	3546	Solid	2-Methylnaphthalene
8270D_LL_PAH	3546	Solid	Acenaphthene
8270D_LL_PAH	3546	Solid	Acenaphthylene
8270D_LL_PAH	3546	Solid	Anthracene
8270D_LL_PAH	3546	Solid	Benzo[a]anthracene
8270D_LL_PAH	3546	Solid	Benzo[a]pyrene
8270D_LL_PAH	3546	Solid	Benzo[b]fluoranthene
8270D_LL_PAH	3546	Solid	Benzo[g,h,i]perylene
8270D_LL_PAH	3546	Solid	Benzo[k]fluoranthene
8270D_LL_PAH	3546	Solid	Bis(2-ethylhexyl) phthalate
8270D_LL_PAH	3546	Solid	Chrysene
8270D_LL_PAH	3546	Solid	Dibenz(a,h)anthracene
8270D_LL_PAH	3546	Solid	Fluoranthene
8270D_LL_PAH	3546	Solid	Fluorene
8270D_LL_PAH	3546	Solid	Indeno[1,2,3-cd]pyrene
8270D_LL_PAH	3546	Solid	Naphthalene
8270D_LL_PAH	3546	Solid	Phenanthrene
8270D_LL_PAH	3546	Solid	Pyrene
9045D		Solid	pH
9045D		Solid	Temperature
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids
SM 2510B		Solid	Specific Conductance

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-24
A2LA	ISO/IEC 17025	0001.01	11-30-24

Eurofins New England

Accreditation/Certification Summary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alabama	State	43200	01-31-25
Alaska	State	PA00009	06-30-24
Alaska (UST)	State	17-027	02-28-25
Arizona	State	AZ0780	03-12-25
Arkansas DEQ	State	88-00660	08-09-24
California	State	2792	11-30-24
Colorado	State	PA00009	06-30-24
Connecticut	State	PH-0746	06-30-25
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-25
Delaware (DW)	State	N/A	01-31-25
Florida	NELAP	E87997	06-30-25
Georgia (DW)	State	C048	01-31-25
Hawaii	State	N/A	01-31-25
Illinois	NELAP	200027	01-31-25
Iowa	State	361	03-01-24 *
Kansas	NELAP	E-10151	10-31-24
Kentucky (DW)	State	KY90088	12-31-24
Kentucky (UST)	State	0001.01	11-30-24
Kentucky (WW)	State	KY90088	12-31-23 *
Louisiana (All)	NELAP	02055	06-30-24
Maine	State	2019012	03-12-25
Maryland	State	100	06-30-24
Massachusetts	State	M-PA009	06-30-24
Michigan	State	9930	01-31-25
Minnesota	NELAP	042-999-487	12-31-24
Mississippi	State	023	01-31-25
Missouri	State	450	01-31-25
Montana (DW)	State	0098	01-01-25
Nebraska	State	NE-OS-32-17	01-31-25
New Hampshire	NELAP	2730	01-10-25
New Jersey	NELAP	PA011	06-30-24
New York	NELAP	10670	03-31-24
North Carolina (DW)	State	42705	07-31-24
North Carolina (WW/SW)	State	521	12-31-24
Oklahoma	NELAP	9804	08-31-24
Oregon	NELAP	PA200001	09-11-24
Pennsylvania	NELAP	36-00037	01-28-25
Quebec Ministry of Environment and Fight against Climate Change	PALA	507	09-16-24
Rhode Island	State	LAO00338	12-30-24
South Carolina	State	89002	01-31-24 *
Tennessee	State	02838	01-31-25
Texas	NELAP	T104704194-23-46	08-31-24
USDA	US Federal Programs	525-22-298-19481	10-25-25
Vermont	State	VT - 36037	10-28-24
Virginia	NELAP	460182	06-14-25
Washington	State	C457	04-11-24
West Virginia (DW)	State	9906 C	01-31-25
West Virginia DEP	State	055	07-31-24
Wyoming	State	8TMS-L	01-31-25

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins New England

Accreditation/Certification Summary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Wyoming (UST)	A2LA	0001.01	11-30-24

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Method Summary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds (GC/MS)	MA DEP	EET NE
8270D	Semivolatile Organic Compounds (GC/MS)	MA DEP	EET NE
8270D_LL_PAH	Semivolatile Organic Compounds (GC/MS) Low level PAH	SW846	EET NE
8082	Polychlorinated Biphenyls (GC/ECD)	MA DEP	EET NE
8100	Polynuclear Aromatic Hydrocarbons (PAHs) (GC)	SW846	EET NE
6010D	Metals (ICP)	SW846	EET NE
7471A	Mercury (CVAA)	SW846	EET NE
1010A	Ignitability, Pensky-Martens Closed-Cup Method	SW846	ELLE
9012	Cyanide, Reactive	SW846	ELLE
9034	Sulfide, Reactive	SW846	ELLE
9045D	pH	SW846	EET NE
9060	Organic Carbon, Total (TOC)	SW846	ELLE
Moisture	Percent Moisture	EPA	EET NE
SM 2510B	Conductivity, Specific Conductance	SM	EET NE
1311	TCLP Extraction	SW846	EET NE
3010A	Preparation, Total Metals	SW846	EET NE
3050B	Preparation, Metals	SW846	EET NE
3540C	Soxhlet Extraction	SW846	EET NE
3546	Microwave Extraction	SW846	EET NE
5035	Closed System Purge and Trap	SW846	EET NE
7.3.3	Cyanide, Reactive	SW846	ELLE
7.3.4	Sulfide, Reactive	SW846	ELLE
7471B	Preparation, Mercury	SW846	EET NE
DI Leach	Deionized Water Leaching Procedure	ASTM	EET NE
Frozen Preserve	Freezing Samples	None	EET NE

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

MA DEP = Massachusetts Department Of Environmental Protection

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET NE = Eurofins New England, 646 Camp Ave, North Kingstown, RI 02852, TEL (413)789-9018

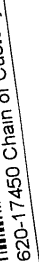
ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
620-17450-1	ATC-3 (0-5)	Solid	03/15/24 09:10	03/18/24 15:25
620-17450-2	ATC-3 (5-10)	Solid	03/15/24 09:30	03/18/24 15:25
620-17450-3	ATC-2 (0-5)	Solid	03/15/24 10:15	03/18/24 15:25
620-17450-4	ATC-2 (5-10)	Solid	03/15/24 11:00	03/18/24 15:25
620-17450-5	ATC-1 (0-5)	Solid	03/15/24 11:20	03/18/24 15:25
620-17450-6	ATC-1 (5-10)	Solid	03/15/24 11:30	03/18/24 15:25
620-17450-7	Comp (0-5)	Solid	03/15/24 12:00	03/18/24 15:25
620-17450-8	Comp (5-10)	Solid	03/15/24 12:15	03/18/24 15:25
620-17450-9	ATC-8 (0-5)	Solid	03/14/24 10:00	03/18/24 15:25
620-17450-10	ATC-8 (5-10)	Solid	03/14/24 11:50	03/18/24 15:25
620-17450-11	ATC-7 (0-5)	Solid	03/14/24 11:10	03/18/24 15:25
620-17450-12	ATC-7 (5-10)	Solid	03/14/24 12:10	03/18/24 15:25
620-17450-13	ATC-6 (0-5)	Solid	03/14/24 12:30	03/18/24 15:25
620-17450-14	ATC-6 (5-10)	Solid	03/14/24 12:45	03/18/24 15:25
620-17450-15	ATC-4 (0-5)	Solid	03/14/24 13:40	03/18/24 15:25
620-17450-16	ATC-4 (5-10)	Solid	03/14/24 13:55	03/18/24 15:25
620-17450-17	ATC-5 (0-5)	Solid	03/14/24 14:25	03/18/24 15:25
620-17450-18	ATC-5 (5-10)	Solid	03/14/24 12:10	03/18/24 15:25



alytical

1750

CHAIN OF CUSTODY RECORD

Special Handling:

- ☒ Standard TAT - 7 to 10 business days
- ☐ Rush TAT - Date Needed

All TATs subject to laboratory approval
Min 24-hr notification needed for rushes
Samples disposed after 30 days unless otherwise specified

Page 1 of 2

[illegible]

Sample shipping address: 11 Almqren Drive • Aqawam, MA 01001 • 413-789-9018 • www.EurofinsUS.com/Spectrum

Rev. Nov 2016

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Environment Testing

mb

Login Sample Receipt Checklist

Client: Atlas Technical Consultants LLC

Job Number: 620-17450-1

Login Number: 17450

List Source: Eurofins New England

List Number: 1

Creator: Scott, Krishnan F

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Atlas Technical Consultants LLC

Job Number: 620-17450-1

Login Number: 17450

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

List Number: 2

List Creation: 03/19/24 12:15 PM

Creator: Ballard, Megan

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable, where thermal pres is required ($\leq 6^{\circ}\text{C}$, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temp acceptable, where thermal pres is required ($\leq 6^{\circ}\text{C}$, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace $> 6\text{mm}$ in diameter (none, if from WV)?	N/A	



APPENDIX F

RTN 3-23246 GROUNDWATER ELEVATION AND DATA TABLES

Table 9-1. Groundwater Elevations
Phase V Status Report No. 24 and Remedial Monitoring Report No. 39
50 Tufts Street
Somerville, Massachusetts

Monitoring Well ID	Well Screen Interval (ft bgs)	Gauging Date:	5/15/2006		5/16/2006		5/23/2006		5/31/2006		7/24/2006		8/1/2006		8/3/2006	
		Elevation of Measuring Point (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)
MW-1	unknown	25.90	9.69	16.21	9.53	16.37	10.9	15	11.39	14.51	--	--	--	--	--	--
MW-2	unknown	25.38	8.99	16.39	10.36	15.02	Dry	Dry	Dry	Dry	--	--	--	--	--	--
MW-3	unknown	25.31	8.88	16.43	9.32	15.99	11.16	14.15	12.71	12.6	--	--	--	--	--	--
MW-101	9-19	26.75	--	--	10.56	16.19	11.53	15.22	12.1	14.65	12.33	14.42	12.51	14.24	13.47	13.28
MW-102	6-16	18.89	--	--	6.62	12.27	6.86	12.03	7.44	11.45	7.93	10.96	8.16	10.73	9.11	9.78
MW-103	6-16	19.47	--	--	9.5	10.37	9.97	10.74	10.74	8.73	11.15	8.32	11.31	8.16	12.24	7.23
MW-104	5-15	17.67	--	--	--	--	7.93	9.74	8.89	8.78	9.06	8.61	9.39	8.28	10.29	7.38
MW-105	19-29	38.84	--	--	19.49	19.35	20.21	18.63	20.7	18.14	21.18	17.66	21.43	17.41	22.41	16.43
MW-106	9 - 19	26.33	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-107	2 - 12	14.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-108	2 - 12	12.74	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-109	3 - 13	24.12	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-110	3 - 13	15.58	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-111	4 - 14	18.95	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-112	3 - 10	18.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-112a	4-19	17.78	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-113	10-20	26.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-114	7-17	29.43	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-115	10-25	27.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-116	5-15	13.45	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-117S	5 - 20	21.94	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-117T	35 - 45	21.87	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-117D	60 - 70	21.78	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-118S	3 - 14	15.52	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-118T	39.5 - 49.5	15.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-118D	70 - 80	15.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-119S	5 - 20	11.74	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-119T	42 - 47	11.67	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-120S	5 - 20	12.54	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-120D	28 - 38	12.45	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-121S	5 - 20	12.44	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-121D	32 - 47	12.81	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-122	4 - 16	16.42	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GEO-1	5 - 20	25.88	9.69	16.19	9.9	15.98	10.92	14.96	11.36	14.52	--	--	--	--	--	--
GEO-2	5 - 20	26.54	9.76	16.78	--	--	11.38	15.16	11.91	14.63	--	--	--	--	--	--
GEO-3	5 - 20	25.64	10.43	15.21	9.59	16.05	9.87	15.77	10.67	14.97	11.67	13.97	11.85	13.79	12.84	12.8
GEO-4	4 - 19	21.69	=	=	7.79	13.9	9.85	11.84	10.78	10.91	11.25	10.44	11.45	10.24	12.43	9.26
GEO-5	5 - 20	20.14	=	=	6.78	13.36	9.08	11.06	9.96	10.18	10.29	9.85	10.56	9.58	11.51	8.63
GEO-6	5 - 20	17.62	=	=	5.66	11.96	7.39	10.23	8.23	9.39	8.43	9.19	8.73	8.89	9.64	7.98
SH-1	9 - 14	29.55	10.15	19.4	11.4	18.15	Dry	Dry	18.15	Dry	--	--	--	--	--	--
SH-2	7 - 14	29.64	5.71	23.93	7.86	21.78	12.07	17.57	12.22	17.42	--	--	--	--	--	--
SH-3	8 - 13	29.66	7.54	22.12	8.56	21.1	12.73	16.93	12.96	16.7	--	--	--	--	--	--
SH-4	11 - 16	29.63	13.53	16.1	13.48	16.15	14.48	15.15	15.02	14.61	--	--	--	--	--	--
SH-5	8 - 13	29.63	Dry	Dry	--	--	12.99	16.64	13.03	16.6	--	--	--	--	--	--
SH-MW1	10 - 30	24.02	6.72	17.3	--	--	11.44	12.58	12.18	11.84	--	--	--	--	--	--
SH-MW2	10 - 25	24.27	9.33	14.94	--	--	12.05	12.22	12.69	11.58	--	--	--	--	--	--
SH-MW3	10 - 24	22.31	7.8	14.51	--	--	10.26	12.05	11.03	11.28	--	--	--	--	--	--
MW201	11-21	27.51	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW202	10.5-20.5	27.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW203	6-18	21.80	--	--	--	--	--	--	--	--	--	--	--	--	--	--

- General Notes:
- ft = feet.
 - bgs = below ground surface.
 - ID = identification.
 - GW = groundwater.
 - NAVD = North American Vertical Datum of 1988.
 - The top of the PVC riser was used as the measuring point for depth to groundwater.
 - "--" = Well not yet installed, abandoned, or not measured.

Table 9-1. Groundwater Elevations
Phase V Status Report No. 24 and Remedial Monitoring Report No. 39
50 Tufts Street
Somerville, Massachusetts

		Gauging Date:	8/16/2006		9/29/2006		10/4/2006		11/14/2006		12/12/2006		1/16/2007		2/12/2007	
Monitoring Well ID	Well Screen Interval (ft bgs)	Elevation of Measuring Point (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)
MW-1	unknown	25.90	11.9	14	--	--	11.88	14.02	--	--	--	--	11.6	14.3	--	--
MW-2	unknown	25.38	Dry	Dry	--	--	--	--	--	--	--	--	Destroyed	Destroyed	--	--
MW-3	unknown	25.31	13.73	11.58	--	--	13.75	11.56	--	--	--	--	13.05	12.26	--	--
MW-101	9-19	26.75	12.78	13.97	12.85	13.9	12.76	13.99	12.25	14.5	12.57	14.18	12.4	14.35	12.81	13.94
MW-102	6-16	18.89	8.51	10.38	8.68	10.21	8.52	10.37	7.64	11.25	8.01	10.88	7.72	11.17	8.52	10.37
MW-103	6-16	19.47	11.72	7.75	11.98	7.49	11.92	7.55	11	8.47	11.21	8.26	10.88	8.59	11.74	7.73
MW-104	5-15	17.67	9.87	7.8	9.95	7.72	9.92	7.75	--	--	--	--	8.73	8.94	--	--
MW-105	19-29	38.84	21.91	16.93	22.27	16.57	22.18	16.66	21.16	17.68	21.76	17.08	21.46	17.38	22.03	16.81
MW-106	9 - 19	26.33	--	--	--	--	--	--	--	--	--	--	--	--	12.27	14.06
MW-107	2 - 12	14.63	--	--	--	--	--	--	--	--	--	--	--	--	4.54	10.09
MW-108	2 - 12	12.74	--	--	--	--	--	--	--	--	--	--	--	--	4.93	7.81
MW-109	3 - 13	24.12	--	--	--	--	--	--	--	--	--	--	--	--	12.07	12.05
MW-110	3 - 13	15.58	--	--	--	--	--	--	--	--	--	--	--	--	5.99	9.59
MW-111	4 - 14	18.95	--	--	--	--	--	--	--	--	--	--	--	--	11.38	7.57
MW-112	3 - 10	18.16	--	--	--	--	--	--	--	--	--	--	--	--	Dry	Dry
MW-112a	4-19	17.78	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-113	10-20	26.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-114	7-17	29.43	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-115	10-25	27.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-116	5-15	13.45	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-117S	5 - 20	21.94	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-117T	35 - 45	21.87	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-117D	60 - 70	21.78	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-118S	3 - 14	15.52	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-118T	39.5 - 49.5	15.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-118D	70 - 80	15.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-119S	5 - 20	11.74	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-119T	42 - 47	11.67	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-120S	5 - 20	12.54	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-120D	28 - 38	12.45	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-121S	5 - 20	12.44	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-121D	32 - 47	12.81	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-122	4 - 16	16.42	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GEO-1	5 - 20	25.88	11.82	14.06	--	--	11.85	14.03	--	--	--	--	11.55	14.33	--	--
GEO-2	5 - 20	26.54	12.51	14.03	--	--	12.51	14.03	--	--	--	--	12.2	14.34	--	--
GEO-3	5 - 20	25.64	12.25	13.39	12.37	2.84	12.35	13.29	11.63	14.01	11.72	13.92	11.58	14.06	12.21	13.43
GEO-4	4 - 19	21.69	11.9	9.79	12.09	9.6	12.04	9.65	10.58	11.11	11.31	10.38	10.77	10.92	11.83	9.86
GEO-5	5 - 20	20.14	10.99	9.15	11.21	8.93	11.15	8.99	9.47	10.67	10.48	9.66	9.73	10.41	11.02	9.12
GEO-6	5 - 20	17.62	9.25	8.37	9.41	8.21	9.26	8.36	7.65	9.97	8.82	8.8	8.11	9.51	9.3	8.32
SH-1	9 - 14	29.55	Dry	Dry	--	--	Dry	Dry	--	--	--	--	Dry	Dry	--	--
SH-2	7 - 14	29.64	11.98	17.66	--	--	12	17.64	--	--	--	--	Dry	Dry	--	--
SH-3	8 - 13	29.66	Dry	Dry	--	--	Dry	Dry	--	--	--	--	Dry	Dry	--	--
SH-4	11 - 16	29.63	15.09	14.54	--	--	15.1	14.53	--	--	--	--	Dry	Dry	--	--
SH-5	8 - 13	29.63	Dry	Dry	--	--	Dry	Dry	--	--	--	--	Dry	Dry	--	--
SH-MW1	10 - 30	24.02	13.09	10.93	--	--	13.17	10.85	--	--	--	--	12.21	11.81	--	--
SH-MW2	10 - 25	24.27	13.38	10.89	--	--	13.41	10.86	--	--	--	--	12.73	11.54	--	--
SH-MW3	10 - 24	22.31	13	9.31	--	--	12.04	10.27	--	--	--	--	11.04	11.27	--	--
MW201	11-21	27.51	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW202	10.5-20.5	27.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW203	6-18	21.80	--	--	--	--	--	--	--	--	--	--	--	--	--	--

- General Notes:
- ft = feet.
 - bgs = below ground surface.
 - ID = identification.
 - GW = groundwater.
 - NAVD = North American Vertical Datum of 1988.
 - The top of the PVC riser was used as the measuring point for depth to groundwater.
 - "--" = Well not yet installed, abandoned, or not measured.

Table 9-1. Groundwater Elevations
Phase V Status Report No. 24 and Remedial Monitoring Report No. 39
50 Tufts Street
Somerville, Massachusetts

Monitoring Well ID	Well Screen Interval (ft bgs)	Gauging Date:	3/14/2007		4/12/2007		5/29/2007		6/26/2007		7/16/2007		8/22/2007		9/27/2007		10/23/2007	
		Elevation of Measuring Point (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)
MW-1	unknown	25.90	--	--	11.39	14.51	11.41	14.49	11.8	14.1	12.04	13.86	--	--	12.26	13.64	12.07	13.83
MW-2	unknown	25.38	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	unknown	25.31	--	--	12.57	12.74	14.89	10.42	13.6	11.71	13.94	11.37	--	--	14.34	10.97	13.94	11.37
MW-101	9-19	26.75	12.34	14.41	12.11	14.64	12.17	14.58	12.62	14.13	12.85	13.9	13.03	13.72	13.17	13.58	12.91	13.84
MW-102	6-16	18.89	--	--	7.46	11.43	6.72	12.17	8.36	10.53	8.74	10.15	9.08	9.81	9.35	9.54	8.97	9.92
MW-103	6-16	19.47	11	8.47	10.66	8.81	10.81	8.66	11.47	8.0	11.92	7.55	12.3	7.17	12.63	6.84	--	--
MW-104	5-15	17.67	--	--	8.75	8.92	--	--	9.62	8.05	10.09	7.58	10.36	7.31	10.61	7.06	10.31	7.36
MW-105	19-29	38.84	21.56	17.28	20.88	17.96	20.86	17.98	21.55	17.29	22.13	16.71	22.79	16.05	23.18	15.66	22.96	15.88
MW-106	9 - 19	26.33	12.91	13.42	11.65	14.68	11.69	14.64	12.07	14.26	12.33	14	12.48	13.85	12.61	13.72	12.39	13.94
MW-107	2 - 12	14.63	4.5	10.13	4.49	10.14	4.46	10.17	4.48	10.15	4.52	10.11	4.75	9.88	4.51	10.12	4.47	10.16
MW-108	2 - 12	12.74	4.02	8.72	9.91	2.83	4.25	8.49	5.06	7.68	6.59	6.15	6.25	6.49	6.28	6.46	5.86	6.88
MW-109	3 - 13	24.12	11.27	12.85	10.27	13.85	10.73	13.39	11.76	12.36	12.24	11.88	Dry	Dry	Dry	Dry	Dry	Dry
MW-110	3 - 13	15.58	1.46	14.12	1.04	14.54	2.56	13.02	6.57	9.01	7.17	8.41	7.86	7.72	8.37	7.21	6.92	8.66
MW-111	4 - 14	18.95	10.62	8.33	10.65	8.3	10.68	8.27	11.11	7.84	11.54	7.41	11.96	6.99	12.34	6.61	11.99	6.96
MW-112	3 - 10	18.16	8.01	10.15	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry
MW-112a	4-19	17.78	12.76	5.02	12.76	5.02	12.67	5.11	12.81	4.97	12.88	4.9	--	--	12.95	4.83	12.8	4.98
MW-113	10-20	26.16	11.66	14.5	11.44	14.72	11.51	14.65	11.99	14.17	12.22	13.94	12.43	13.73	12.58	13.58	12.3	13.86
MW-114	7-17	29.43	12.67	16.76	11.27	18.16	11.53	17.9	12.88	16.55	15.57	13.86	14.24	15.19	14.84	14.59	14.66	14.77
MW-115	10-25	27.15	17.19	9.96	16.21	10.94	16.63	10.52	17.42	9.73	17.97	9.18	18.38	8.77	18.81	8.34	18.37	8.78
MW-116	5-15	13.45	8.78	4.67	8.34	5.11	8.65	4.8	8.76	4.69	--	--	8.85	4.6	8.91	4.54	8.83	4.62
MW-117S	5 - 20	21.94	--	--	--	--	--	--	--	--	15.27	6.67	15.7	6.24	16.03	5.91	16.2	5.74
MW-117T	35 - 45	21.87	--	--	--	--	--	--	--	--	15.95	5.92	16.38	5.49	16.81	5.06	16.91	4.96
MW-117D	60 - 70	21.78	--	--	--	--	--	--	--	--	15.87	5.91	16.26	5.52	16.69	5.09	16.77	5.01
MW-118S	3 - 14	15.52	--	--	--	--	--	--	--	--	11.64	3.88	9.84	5.68	10.2	5.32	9.42	6.1
MW-118T	39.5 - 49.5	15.30	--	--	--	--	--	--	--	--	10.36	4.94	10.51	4.79	10.74	4.56	10.68	4.62
MW-118D	70 - 80	15.15	--	--	--	--	--	--	--	--	10.18	4.97	10.32	4.83	10.55	4.6	10.49	4.66
MW-119S	5 - 20	11.74	--	--	--	--	--	--	--	--	--	--	4.91	6.83	4.99	6.75	4.93	6.81
MW-119T	42 - 47	11.67	--	--	--	--	--	--	--	--	--	--	6.45	5.22	6.8	4.87	6.72	4.95
MW-120S	5 - 20	12.54	--	--	--	--	--	--	--	--	--	--	5.25	7.29	5.35	7.19	4.71	7.83
MW-120D	28 - 38	12.45	--	--	--	--	--	--	--	--	--	--	--	--	4.21	8.24	3.94	8.51
MW-121S	5 - 20	12.44	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7.36	5.08
MW-121D	32 - 47	12.81	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7.92	4.89
MW-122	4 - 16	16.42	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GEO-1	5 - 20	25.88	--	--	11.36	14.52	11.38	14.5	11.73	14.15	11.93	13.95	12.1	13.78	12.21	13.67	11.98	13.9
GEO-2	5 - 20	26.54	--	--	11.97	14.57	11.99	14.55	12.4	14.14	13.6	12.94	12.81	13.73	12.91	13.63	12.63	13.91
GEO-3	5 - 20	25.64	11.49	14.15	10.76	14.88	11.04	14.6	11.94	13.7	--	--	12.7	12.94	12.94	12.7	12.61	13.03
GEO-4	4 - 19	21.69	11.03	10.66	10.51	11.18	10.87	10.82	11.64	10.05	12.09	9.6	12.55	9.14	13.02	8.67	12.64	9.05
GEO-5	5 - 20	20.14	10.15	9.99	9.7	10.44	10.01	10.13	10.79	9.35	11.25	8.89	11.74	8.4	11.18	8.96	11.72	8.42
GEO-6	5 - 20	17.62	8.54	9.08	8.32	9.3	8.25	9.37	8.9	8.72	9.5	8.12	9.92	7.7	10.22	7.4	9.96	7.66
SH-1	9 - 14	29.55	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-2	7 - 14	29.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-3	8 - 13	29.66	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-4	11 - 16	29.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-5	8 - 13	29.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-MW1	10 - 30	24.02	--	--	12.01	12.01	12.26	11.76	---	---	---	---	--	--	--	--	--	--
SH-MW2	10 - 25	24.27	--	--	12.61	11.66	12.74	11.53	13.25	11.02	13.48	10.79	13.72	10.55	14.04	10.23	13.68	10.59
SH-MW3	10 - 24	22.31	--	--	10.81	11.5	--	--	11.72	10.59	12.08	10.23	12.43	9.88	12.79	9.52	12.41	9.9
MW201	11-21	27.51	--	--	--	--	--	--	--	--	--	--	13.71	13.8	13.83	13.68	13.58	13.93
MW202	10.5-20.5	27.82	--	--	--	--	--	--	--	--	--	--	13.99	13.83	14.08	13.74	13.88	13.94
MW203	6-18	21.80	--	--	--	--	--	--	--	--	--	--	14.05	7.75	14.39	7.41	13.86	7.94

- General Notes:
- ft = feet.
 - bgs = below ground surface.
 - ID = identification.
 - GW = groundwater.
 - NAVD = North American Vertical Datum of 1988.
 - The top of the PVC riser was used as the measuring point for depth to groundwater.
 - "--" = Well not yet installed, abandoned, or not measured.

Table 9-1. Groundwater Elevations
Phase V Status Report No. 24 and Remedial Monitoring Report No. 39
50 Tufts Street
Somerville, Massachusetts

Monitoring Well ID	Well Screen Interval (ft bgs)	Gauging Date:	11/30/2007		1/9/2008		2/26/2008		3/18/2008		4/15/2008		5/19/2008		7/14/08		8/22/08	
		Elevation of Measuring Point (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)
MW-1	unknown	25.90	11.95	13.95	--	--	--	--	--	--	11.42	14.48	11.57	14.33	--	--	--	--
MW-2	unknown	25.38	--	--	--	--	--	--	--	--	--	---	--	--	--	--	--	--
MW-3	unknown	25.31	13.75	11.56	12.86	12.45	12.05	13.26	12.37	12.94	12.81	12.5	12.99	---	--	--	--	--
MW-101	9-19	26.75	13.82	12.93	12.11	14.64	--	--	11.85	14.9	12.02	14.73	12.26	14.49	13.11	13.64	--	--
MW-102	6-16	18.89	8.01	10.88	7.46	11.43	7.29	11.6	7.17	11.72	8.57	10.32	7.9	10.99	9.51	9.38	8.00	10.89
MW-103	6-16	19.47	12.18	7.29	10.74	8.73	10.51	8.96	10.5	8.97	10.82	8.65	11.11	8.36	12.17	7.30	11.17	8.30
MW-104	5-15	17.67	10.07	7.6	8.86	8.81	8.61	9.06	8.48	9.19	9.84	7.83	9.25	8.42	9.67	8.00	9.06	8.61
MW-105	19-29	38.84	22.74	16.1	21.39	17.45	20.79	18.05	20.41	18.43	20.91	17.93	21.24	17.6	22.02	16.82	21.40	17.44
MW-106	9 - 19	26.33	12.27	14.06	11.71	14.62	11.51	14.82	11.38	14.95	12.54	13.79	11.72	14.61	11.68	14.65	11.73	14.60
MW-107	2 - 12	14.63	4.44	10.19	4.35	10.28	--	--	4.46	10.17	5.58	9.05	---	---	4.52	10.11	4.41	10.22
MW-108	2 - 12	12.74	4.74	8.0	3.71	9.03	4.61	8.13	3.68	9.06	3.91	8.83	3.99	8.75	5.16	7.58	4.44	8.30
MW-109	3 - 13	24.12	12.78	11.34	10.64	13.48	10.06	14.06	10.02	14.1	11.64	12.48	11.29	12.83	11.87	12.25	11.18	12.94
MW-110	3 - 13	15.58	3.34	12.24	--	--	0.79	14.79	1.12	14.46	1.57	14.01	2.5	13.08	--	--	3.59	11.99
MW-111	4 - 14	18.95	12.27	6.68	10.51	8.44	10.5	8.45	10.54	8.41	16.64	2.31	10.71	8.24	12.23	6.72	10.73	8.22
MW-112	3 - 10	18.16	Dry	Dry	Dry	Dry	Dry	Dry	--	--	---	---	---	---	--	--	8.33	9.83
MW-112a	4-19	17.78	--	--	12.43	5.35	12.52	5.26	12.61	5.17	13.71	4.07	12.77	5.01	13.56	4.22	12.93	4.85
MW-113	10-20	26.16	12.6	13.56	11.5	14.66	11.28	14.88	11.15	15.01	11.39	14.77	11.62	14.54	12.01	14.15	11.63	14.53
MW-114	7-17	29.43	14.31	15.12	12.08	17.35	11.11	18.32	10.75	18.68	12.42	17.01	12.3	17.13	13.24	16.19	12.21	17.22
MW-115	10-25	27.15	18.24	8.91	16.18	10.97	15.85	11.3	15.86	11.29	16.45	10.7	16.72	10.43	18.49	8.66	16.78	10.37
MW-116	5-15	13.45	--	--	8.6	4.85	8.68	4.77	8.77	4.68	8.85	4.6	8.88	4.57	9.09	4.36	9.01	4.44
MW-117S	5 - 20	21.94	15.95	5.99	13.97	7.97	13.52	8.42	13.5	8.44	14.22	7.72	14.6	7.34	14.99	6.95	13.90	8.04
MW-117T	35 - 45	21.87	16.58	5.29	14.58	7.29	13.97	7.9	13.9	7.97	14.67	7.2	14.94	6.93	15.68	6.19	15.27	6.60
MW-117D	60 - 70	21.78	16.44	5.34	14.46	7.32	13.86	7.92	13.81	7.97	14.51	7.27	14.89	6.89	15.61	6.17	14.67	7.11
MW-118S	3 - 14	15.52	9.4	6.12	8.55	6.97	8.34	7.18	8.4	7.12	10	5.52	9.38	6.14	9.64	5.88	8.48	7.04
MW-118T	39.5 - 49.5	15.30	10.5	4.8	9.93	5.37	9.49	5.81	9.53	5.77	9.83	5.47	9.94	5.36	10.35	4.95	9.92	5.38
MW-118D	70 - 80	15.15	10.25	4.9	9.55	5.6	9.3	5.85	9.35	5.8	9.64	5.51	9.8	5.35	10.11	5.04	9.70	5.45
MW-119S	5 - 20	11.74	4.85	6.89	4.63	7.11	4.6	7.14	4.56	7.18	4.91	6.83	4.92	6.82	4.94	6.80	6.08	5.66
MW-119T	42 - 47	11.67	6.57	5.1	5.82	5.85	5.63	6.04	5.78	5.89	5.97	5.7	6.1	5.57	6.52	5.15	4.52	7.15
MW-120S	5 - 20	12.54	4.62	7.92	3.51	9.03	4.06	8.48	4.0	8.54	5.1	7.44	4.57	7.97	5.18	7.36	4.61	7.93
MW-120D	28 - 38	12.45	3.48	8.97	3.17	9.28	2.96	9.49	3.11	9.34	3.26	9.19	3.44	9.01	3.82	8.63	2.90	9.55
MW-121S	5 - 20	12.44	7.41	5.03	7.24	5.2	7.36	5.08	7.41	5.03	9.39	3.05	7.29	5.15	9.21	3.23	7.70	4.74
MW-121D	32 - 47	12.81	7.75	5.06	6.95	5.86	6.83	5.98	6.91	5.9	7.31	5.5	7.27	5.54	7.64	5.17	7.30	5.51
MW-122	4 - 16	16.42	--	--	--	--	12.98	3.44	13	3.42	13.03	3.39	12.99	3.43	13.15	3.27	13.17	3.25
GEO-1	5 - 20	25.88	11.91	13.97	11.41	14.47	11.22	14.66	--	--	11.25	14.63	11.4	14.48	12.32	13.56	12.00	13.88
GEO-2	5 - 20	26.54	12.57	13.97	12.02	14.52	11.77	14.77	--	--	12.81	13.73	12.01	14.53	11.73	14.81	11.41	15.13
GEO-3	5 - 20	25.64	12.54	13.1	10.99	14.65	10.71	14.93	--	--	10.97	14.67	---	---	12.05	13.59	11.57	14.07
GEO-4	4 - 19	21.69	12.47	9.22	11.72	9.97	10.36	11.33	10.34	11.35	11.46	10.23	11.13	10.56	11.60	10.09	11.16	10.53
GEO-5	5 - 20	20.14	12.62	7.52	9.92	10.22	9.42	10.72	9.52	10.62	10.8	9.34	10.21	9.93	10.89	9.25	10.28	9.86
GEO-6	5 - 20	17.62	9.96	7.66	8.21	9.41	7.78	9.84	7.86	9.76	9.11	8.51	8.51	9.11	9.20	8.42	7.91	9.71
SH-1	9 - 14	29.55	--	--	--	--	--	--	--	--	---	---	---	---	--	--	--	--
SH-2	7 - 14	29.64	--	--	--	--	--	--	--	--	---	---	---	---	--	--	--	--
SH-3	8 - 13	29.66	--	--	--	--	--	--	--	--	---	---	---	---	--	--	--	--
SH-4	11 - 16	29.63	--	--	--	--	--	--	--	--	---	---	---	---	--	--	--	--
SH-5	8 - 13	29.63	--	--	--	--	--	--	--	--	---	---	---	---	--	--	--	--
SH-MW1	10 - 30	24.02	--	--	--	--	--	--	--	--	---	---	---	---	--	--	--	--
SH-MW2	10 - 25	24.27	13.85	10.42	12.77	11.5	12.49	11.78	12.46	11.81	13.62	10.65	12.89	11.38	11.83	12.44	12.92	11.35
SH-MW3	10 - 24	22.31	12.05	10.26	11.55	10.76	10.68	11.63	10.65	11.66	11.83	10.48	11.21	11.1	13.27	9.04	11.30	11.01
MW201	11-21	27.51	13.5	14.01	12.98	14.53	12.76	14.75	12.64	14.87	12.85	14.66	13.94	13.57	13.31	14.2	13.00	14.51
MW202	10.5-20.5	27.82	13.81	14.01	13.41	14.41	13.22	14.6	13.12	14.7	12.73	15.09	13.37	14.45	13.68	14.14	13.41	14.41
MW203	6-18	21.80	13.61	8.19	12.86	8.94	12.03	9.77	12	9.8	13.31	8.49	12.68	9.12	13.15	8.65	12.55	9.25

- General Notes:
- ft = feet.
 - bgs = below ground surface.
 - ID = identification.
 - GW = groundwater.
 - NAVD = North American Vertical Datum of 1988.
 - The top of the PVC riser was used as the measuring point for depth to groundwater.
 - "--" = Well not yet installed, abandoned, or not measured.

Table 9-1. Groundwater Elevations
Phase V Status Report No. 24 and Remedial Monitoring Report No. 39
50 Tufts Street
Somerville, Massachusetts

Monitoring Well ID	Well Screen Interval (ft bgs)	Gauging Date:	10/20/08		1/13/09		4/13/09		7/14/09		10/14/09		4/12/10		10/27/10		4/20/11	
		Elevation of Measuring Point (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)
MW-1	unknown	25.90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	unknown	25.38	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	unknown	25.31	--	--	12.49	12.82	12.28	13.03	12.92	12.39	13.19	12.12	--	--	--	--	--	--
MW-101	9-19	26.75	12.61	14.14	12.07	14.68	11.91	14.84	12.2	14.55	12.37	14.38	11.61	15.14	--	--	11.73	15.02
MW-102	6-16	18.89	8.49	10.4	7.50	11.39	7.35	11.54	7.85	11.04	7.99	10.9	7.11	11.78	--	--	7.04	11.85
MW-103	6-16	19.47	11.87	7.6	10.73	8.74	10.57	8.9	11.07	8.4	11.34	8.13	10.47	9.00	--	--	10.39	9.08
MW-104	5-15	17.67	9.72	7.95	8.71	8.96	7.98	9.69	8.84	8.83	9.38	8.29	8.52	9.15	--	--	9.28	8.39
MW-105	19-29	38.84	21.8	17.04	20.9	17.94	20.65	18.19	21.4	17.44	21.8	17.04	19.84	19.00	--	--	20.63	18.21
MW-106	9 - 19	26.33	11.64	14.69	11.6	14.73	11.49	14.84	overflowing	--	overflowing	--	11.16	15.17	--	--	11.39	14.94
MW-107	2 - 12	14.63	4.49	10.14	4.5	10.13	4.47	10.16	overflowing	--	overflowing	--	4.31	10.32	--	--	4.43	10.2
MW-108	2 - 12	12.74	4.71	8.03	3.4	9.34	3.73	9.01	4.37	8.37	4.66	8.08	3.86	8.88	--	--	3.56	9.18
MW-109	3 - 13	24.12	11.73	12.39	10.43	13.69	10.4	13.72	11.11	13.01	--	--	9.88	14.24	--	--	10.10	14.02
MW-110	3 - 13	15.58	--	--	1.45	14.13	1.1	14.48	2.88	12.7	2.42	13.16	1.39	14.19	--	--	1.67	13.91
MW-111	4 - 14	18.95	11.37	7.58	10.55	8.4	10.56	8.39	10.67	8.28	10.41	8.54	10.57	8.38	--	--	10.62	8.33
MW-112	3 - 10	18.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-112a	4-19	17.78	13.01	4.77	12.78	5.0	12.63	5.15	12.78	5.0	12.58	5.2	12.62	5.16	12.31	5.47	12.14	5.64
MW-113	10-20	26.16	11.99	14.17	11.41	14.75	11.23	14.93	11.56	14.6	11.73	14.43	10.93	15.23	--	--	11.00	15.16
MW-114	7-17	29.43	13.19	16.24	11.25	18.18	10.97	18.46	12.04	17.39	--	--	10.24	19.19	--	--	10.46	18.97
MW-115	10-25	27.15	17.8	9.35	16.35	10.8	15.4	11.75	16.58	10.57	17.4	9.75	16.43	10.72	--	--	16.22	10.93
MW-116	5-15	13.45	--	--	8.94	--	8.87	4.58	8.97	4.48	8.76	4.69	8.85	4.6	--	--	8.32	5.13
MW-117S	5 - 20	21.94	14.67	7.27	14.02	7.92	14.38	7.56	14.66	7.28	14.75	7.19	13.32	8.62	--	--	14.06	7.88
MW-117T	35 - 45	21.87	15.26	6.61	14.45	7.42	14.43	7.44	15.03	6.84	15.26	6.61	13.56	8.31	--	--	14.18	7.69
MW-117D	60 - 70	21.78	15.27	6.51	14.3	7.48	14.26	7.52	14.89	6.89	15.13	6.65	13.48	8.3	--	--	14.01	7.77
MW-118S	3 - 14	15.52	9.05	6.47	8.41	7.11	8.7	6.82	9.43	6.09	9.01	6.51	8.31	7.21	--	--	8.55	6.97
MW-118T	39.5 - 49.5	15.30	10.19	5.11	9.73	5.57	9.64	5.66	9.92	5.38	9.99	5.31	9.49	5.81	--	--	9.33	5.97
MW-118D	70 - 80	15.15	9.99	5.16	9.54	5.61	9.47	5.68	9.74	5.41	9.73	5.42	9.29	5.86	--	--	9.15	6.00
MW-119S	5 - 20	11.74	4.08	7.66	4.41	7.33	4.21	7.53	4.47	7.27	4.33	7.41	4.33	7.41	--	--	4.08	7.66
MW-119T	42 - 47	11.67	6.78	4.89	5.85	5.82	5.8	5.87	6.04	5.63	6.01	5.66	5.68	5.99	--	--	5.55	6.12
MW-120S	5 - 20	12.54	4.01	8.53	4.03	8.51	3.85	8.69	4.31	8.23	3.58	8.96	3.98	8.56	--	--	3.65	8.89
MW-120D	28 - 38	12.45	3.32	9.13	3.18	9.27	3.11	9.34	3.31	9.14	3.29	9.16	3.04	9.41	--	--	3.18	9.27
MW-121S	5 - 20	12.44	9.01	3.43	7.68	4.76	7.57	4.87	7.62	4.82	7.71	4.73	7.67	4.77	--	--	7.12	5.32
MW-121D	32 - 47	12.81	9.64	3.17	7.07	5.74	6.98	5.83	7.27	5.54	7.37	5.44	6.87	5.94	--	--	6.77	6.04
MW-122	4 - 16	16.42	11.42	5.0	13.15	3.27	13.16	3.26	13.14	3.28	13.12	3.3	13.09	3.33	13.04	3.38	13.06	3.36
GEO-1	5 - 20	25.88	12.14	13.74	11.26	14.62	11.07	14.81	11.31	14.57	11.54	14.34	17.06	8.82	--	--	10.92	14.96
GEO-2	5 - 20	26.54	11.58	14.96	11.88	14.66	11.7	14.84	11.99	14.55	12.25	14.29	11.41	15.13	--	--	10.55	15.99
GEO-3	5 - 20	25.64	--	--	--	--	10.86	14.78	11.48	14.16	11.79	13.85	10.27	15.37	--	--	10.62	15.02
GEO-4	4 - 19	21.69	11.89	9.8	10.56	11.13	10.21	11.48	11.00	10.69	--	--	10.26	11.43	--	--	--	--
GEO-5	5 - 20	20.14	11.79	8.35	9.70	10.44	9.30	10.84	10.08	10.06	10.44	9.7	9.48	10.66	--	--	9.18	10.96
GEO-6	5 - 20	17.62	10.95	6.67	8.02	9.6	7.48	10.14	8.18	9.44	8.66	8.96	7.62	10	--	--	7.63	9.99
SH-1	9 - 14	29.55	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-2	7 - 14	29.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-3	8 - 13	29.66	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-4	11 - 16	29.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-5	8 - 13	29.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-MW1	10 - 30	24.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-MW2	10 - 25	24.27	12.01	12.26	12.63	11.64	12.33	11.94	12.77	11.5	13.01	11.26	10.61	13.66	--	--	12.29	11.98
SH-MW3	10 - 24	22.31	12.49	9.82	10.87	11.44	10.52	11.79	11.12	11.19	11.46	10.85	12.39	9.92	--	--	10.46	11.85
MW201	11-21	27.51	14.64	12.87	13.27	14.24	12.69	14.82	12.94	14.57	13.09	14.42	12.42	15.09	--	--	12.57	14.94
MW202	10.5-20.5	27.82	13.29	14.53	12.82	15	13.15	14.67	13.33	14.49	13.55	14.27	12.94	14.88	--	--	13.02	14.80
MW203	6-18	21.80	13.02	8.78	12.25	9.55	11.5	10.3	12.29	9.51	12.77	9.03	12.03	9.77	--	--	11.83	9.97

- General Notes:
- ft = feet.
 - bgs = below ground surface.
 - ID = identification.
 - GW = groundwater.
 - NAVD = North American Vertical Datum of 1988.
 - The top of the PVC riser was used as the measuring point for depth to groundwater.
 - "--" = Well not yet installed, abandoned, or not measured.

Table 9-1. Groundwater Elevations
Phase V Status Report No. 24 and Remedial Monitoring Report No. 39
50 Tufts Street
Somerville, Massachusetts

Monitoring Well ID	Well Screen Interval (ft bgs)	Gauging Date:	11/16/11		4/16/12		11/12/12		4/23/13		11/18/13		4/30/14		6/11/14		11/18/14	
		Elevation of Measuring Point (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)
MW-1	unknown	25.90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	unknown	25.38	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	unknown	25.31	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-101	9-19	26.75	--	--	12.71	14.04	--	--	12.41	14.34	--	--	12.03	14.72	--	--	--	--
MW-102	6-16	18.89	--	--	8.53	10.36	--	--	8.01	10.88	--	--	7.68	11.21	--	--	--	--
MW-103	6-16	19.47	--	--	11.79	7.68	--	--	11.22	8.25	--	--	10.96	8.51	--	--	--	--
MW-104	5-15	17.67	--	--	10.24	7.43	--	--	9.64	8.03	--	--	9.5	8.17	--	--	--	--
MW-105	19-29	38.84	--	--	--	--	--	--	21.31	17.53	--	--	--	--	--	--	--	--
MW-106	9 - 19	26.33	--	--	--	--	--	--	--	--	--	--	11.71	14.62	--	--	--	--
MW-107	2 - 12	14.63	--	--	--	--	--	--	--	--	--	--	3.61	11.02	--	--	--	--
MW-108	2 - 12	12.74	--	--	4.72	8.02	--	--	4.34	8.4	--	--	4.09	8.65	--	--	--	--
MW-109	3 - 13	24.12	--	--	12.15	11.97	--	--	11.37	12.75	--	--	10.79	13.33	--	--	--	--
MW-110	3 - 13	15.58	--	--	--	--	--	--	--	--	--	--	2.61	12.97	--	--	--	--
MW-111	4 - 14	18.95	--	--	11.6	7.35	--	--	11.01	7.94	--	--	10.96	7.99	--	--	--	--
MW-112	3 - 10	18.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-112a	4-19	17.78	12.30	5.48	12.70	5.08	12.72	5.06	12.80	4.98	13.11	4.67	--	--	12.86	4.92	12.39	5.39
MW-113	10-20	26.16	--	--	12.11	14.05	--	--	11.73	14.43	--	--	11.42	14.74	--	--	--	--
MW-114	7-17	29.43	--	--	13.70	15.73	--	--	12.24	17.19	--	--	12.05	17.38	--	--	--	--
MW-115	10-25	27.15	--	--	18.51	8.64	--	--	17.76	9.39	--	--	17.51	9.64	--	--	--	--
MW-116	5-15	13.45	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-117S	5 - 20	21.94	--	--	9.06	12.88	--	--	14.39	7.55	--	--	13.63	8.31	--	--	--	--
MW-117T	35 - 45	21.87	--	--	15.58	6.29	--	--	15.19	6.68	--	--	14.78	7.09	--	--	--	--
MW-117D	60 - 70	21.78	--	--	15.81	5.97	--	--	15.09	6.69	--	--	14.71	7.07	--	--	--	--
MW-118S	3 - 14	15.52	--	--	9.66	5.86	--	--	9.41	6.11	--	--	9.01	6.51	--	--	--	--
MW-118T	39.5 - 49.5	15.30	--	--	10.30	5	--	--	10.12	5.18	--	--	9.94	5.36	--	--	--	--
MW-118D	70 - 80	15.15	--	--	10.11	5.04	10.03	5.12	10.00	5.15	10.73	4.42	9.82	5.33	--	--	10.20	4.95
MW-119S	5 - 20	11.74	--	--	5.14	6.6	--	--	4.70	7.04	--	--	4.31	7.43	--	--	--	--
MW-119T	42 - 47	11.67	--	--	6.50	5.17	--	--	6.25	5.42	--	--	6.11	5.56	--	--	--	--
MW-120S	5 - 20	12.54	--	--	4.78	7.76	--	--	4.26	8.28	--	--	4.19	8.35	--	--	--	--
MW-120D	28 - 38	12.45	--	--	3.87	8.58	--	--	3.40	9.05	--	--	4.41	8.04	--	--	--	--
MW-121S	5 - 20	12.44	--	--	7.26	5.18	--	--	6.93	5.51	--	--	5.95	6.49	--	--	--	--
MW-121D	32 - 47	12.81	--	--	7.69	5.12	7.55	5.26	7.41	5.4	8.13	4.68	7.35	5.46	--	--	7.27	5.54
MW-122	4 - 16	16.42	13.16	3.26	13.1	3.32	13.16	3.26	13.14	3.28	13.12	3.3	13.12	3.30	--	--	13.04	3.38
GEO-1	5 - 20	25.88	--	--	--	--	--	--	11.50	14.38	--	--	11.19	14.69	--	--	--	--
GEO-2	5 - 20	26.54	--	--	11.81	14.73	--	--	12.19	14.35	--	--	11.99	14.55	--	--	--	--
GEO-3	5 - 20	25.64	--	--	12.21	13.43	--	--	11.57	14.07	--	--	11.10	14.54	--	--	--	--
GEO-4	4 - 19	21.69	--	--	11.98	9.71	--	--	11.29	10.4	--	--	11.09	10.6	--	--	--	--
GEO-5	5 - 20	20.14	--	--	11.18	8.96	--	--	10.45	9.69	--	--	10.25	9.89	--	--	--	--
GEO-6	5 - 20	17.62	--	--	9.54	8.08	--	--	8.56	9.06	--	--	8.30	9.32	--	--	--	--
SH-1	9 - 14	29.55	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-2	7 - 14	29.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-3	8 - 13	29.66	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-4	11 - 16	29.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-5	8 - 13	29.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-MW1	10 - 30	24.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-MW2	10 - 25	24.27	--	--	13.53	10.74	--	--	13.13	11.14	--	--	12.95	11.32	--	--	--	--
SH-MW3	10 - 24	22.31	--	--	12.00	10.31	--	--	11.43	10.88	--	--	11.23	11.08	--	--	--	--
MW201	11-21	27.51	--	--	13.43	14.08	--	--	13.15	14.36	--	--	12.97	14.54	--	--	--	--
MW202	10.5-20.5	27.82	--	--	--	--	--	--	13.54	14.28	--	--	13.32	14.50	--	--	--	--
MW203	6-18	21.80	--	--	13.85	7.95	--	--	13.15	8.65	--	--	12.92	8.88	--	--	--	--

- General Notes:
- ft = feet.
 - bgs = below ground surface.
 - ID = identification.
 - GW = groundwater.
 - NAVD = North American Vertical Datum of 1988.
 - The top of the PVC riser was used as the measuring point for depth to groundwater.
 - "--" = Well not yet installed, abandoned, or not measured.

Table 9-1. Groundwater Elevations
Phase V Status Report No. 24 and Remedial Monitoring Report No. 39
50 Tufts Street
Somerville, Massachusetts

Monitoring Well ID	Well Screen Interval (ft bgs)	Gauging Date:	4/1/15		4/17/15		11/19/15		4/27/16		11/21/16		4/14/17		11/8/17		1/31/18	
		Elevation of Measuring Point (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)
MW-1	unknown	25.90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	unknown	25.38	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	unknown	25.31	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-101	9-19	26.75	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-102	6-16	18.89	6.99	11.9	--	--	--	--	8.02	10.87	--	--	--	--	--	--	7.94	10.95
MW-103	6-16	19.47	10.43	9.04	--	--	--	--	11.49	7.98	--	--	--	--	--	--	11.12	8.35
MW-104	5-15	17.67	8.04	9.63	--	--	--	--	10.63	7.04	--	--	9.05	8.62	--	--	11.99	5.68
MW-105	19-29	38.84	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-106	9 - 19	26.33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-107	2 - 12	14.63	--	--	--	--	--	--	4.49	10.14	--	--	4.51	10.12	--	--	4.56	10.07
MW-108	2 - 12	12.74	3.31	9.43	--	--	--	--	4.11	8.63	--	--	3.78	8.96	--	--	4.02	8.72
MW-109	3 - 13	24.12	9.61	14.51	--	--	--	--	11.25	12.87	--	--	9.86	14.26	--	--	11.02	13.10
MW-110	3 - 13	15.58	0.60	14.98	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-111	4 - 14	18.95	10.80	8.15	--	--	--	--	11.50	7.45	--	--	Dry	Dry	--	--	Dry	Dry
MW-112	3 - 10	18.16	--	--	--	--	--	--	--	--	--	--	6.44	11.72	--	--	--	--
MW-112a	4-19	17.78	--	--	12.86	4.92	--	--	11.14	6.64	13.12	4.66	12.88	4.90	15.32	2.46	12.85	4.93
MW-113	10-20	26.16	10.64	15.52	--	--	--	--	11.65	14.51	--	--	10.83	15.33	--	--	13.90	12.26
MW-114	7-17	29.43	10.06	19.37	--	--	--	--	12.45	16.98	--	--	10.70	18.73	--	--	12.89	16.54
MW-115	10-25	27.15	16.50	10.65	--	--	--	--	18.23	8.92	--	--	17.33	9.82	--	--	18.17	8.98
MW-116	5-15	13.45	--	--	--	--	--	--	9.34	4.11	--	--	9.18	4.27	--	--	9.22	4.23
MW-117S	5 - 20	21.94	9.66	12.28	--	--	--	--	14.09	7.85	--	--	12.49	9.45	--	--	16.65	5.29
MW-117T	35 - 45	21.87	13.95	7.92	--	--	--	--	15.59	6.28	--	--	14.36	7.51	--	--	17.76	4.11
MW-117D	60 - 70	21.78	13.88	7.90	--	--	--	--	--	--	--	--	12.93	8.85	--	--	12.11	9.67
MW-118S	3 - 14	15.52	8.04	7.48	--	--	--	--	9.30	6.22	--	--	8.37	7.15	--	--	12.17	3.35
MW-118T	39.5 - 49.5	15.30	9.63	5.67	--	--	--	--	10.37	4.93	--	--	9.80	5.5	--	--	12.45	2.85
MW-118D	70 - 80	15.15	9.47	5.68	--	--	11.99	3.16	10.20	4.95	10.42	4.73	9.61	5.54	10.27	4.88	--	--
MW-119S	5 - 20	11.74	4.16	7.58	--	--	--	--	4.64	7.10	--	--	4.43	7.31	--	--	--	--
MW-119T	42 - 47	11.67	5.80	5.87	--	--	--	--	6.43	5.24	--	--	5.95	5.72	--	--	--	--
MW-120S	5 - 20	12.54	3.54	9.00	--	--	--	--	3.16	9.38	--	--	3.91	8.63	--	--	5.72	6.82
MW-120D	28 - 38	12.45	3.10	9.35	--	--	--	--	3.68	8.77	--	--	3.19	9.26	--	--	6.30	6.15
MW-121S	5 - 20	12.44	6.77	5.67	--	--	--	--	--	--	--	--	7.73	4.71	--	--	7.76	4.68
MW-121D	32 - 47	12.81	7.01	5.80	--	--	8.83	3.98	--	--	7.85	4.96	7.17	5.64	7.75	5.06	7.50	5.31
MW-122	4 - 16	16.42	13.15	3.27	--	--	13.23	3.19	13.19	3.23	13.21	3.21	13.18	3.24	13.17	3.25	13.19	3.23
GEO-1	5 - 20	25.88	10.69	15.19	--	--	--	--	11.39	14.49	--	--	10.75	15.13	--	--	--	--
GEO-2	5 - 20	26.54	11.34	15.20	--	--	--	--	12.18	14.36	--	--	11.51	15.03	--	--	--	--
GEO-3	5 - 20	25.64	9.92	15.72	--	--	--	--	--	--	--	--	10.25	15.39	--	--	11.40	14.24
GEO-4	4 - 19	21.69	10.17	11.52	--	--	--	--	11.61	10.08	--	--	10.59	11.1	--	--	11.20	10.49
GEO-5	5 - 20	20.14	9.29	10.85	--	--	--	--	10.94	9.20	--	--	9.81	10.33	--	--	10.44	9.70
GEO-6	5 - 20	17.62	7.84	9.78	--	--	--	--	9.72	7.90	--	--	8.42	9.2	--	--	9.12	8.50
SH-1	9 - 14	29.55	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-2	7 - 14	29.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-3	8 - 13	29.66	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-4	11 - 16	29.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-5	8 - 13	29.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-MW1	10 - 30	24.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-MW2	10 - 25	24.27	12.41	11.86	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-MW3	10 - 24	22.31	10.55	11.76	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW201	11-21	27.51	12.40	15.11	--	--	--	--	13.15	14.36	--	--	--	--	--	--	15.36	12.15
MW202	10.5-20.5	27.82	12.93	14.89	--	--	--	--	13.53	14.29	--	--	--	--	--	--	15.77	12.05
MW203	6-18	21.80	12.05	9.75	--	--	--	--	13.93	7.87	--	--	--	--	--	--	15.76	6.04

- General Notes:
- ft = feet.
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 - ID = identification.
 - GW = groundwater.
 - NAVD = North American Vertical Datum of 1988.
 - The top of the PVC riser was used as the measuring point for depth to groundwater.
 - "--" = Well not yet installed, abandoned, or not measured.

Table 9-1. Groundwater Elevations
Phase V Status Report No. 24 and Remedial Monitoring Report No. 39
50 Tufts Street
Somerville, Massachusetts

Monitoring Well ID	Well Screen Interval (ft bgs)	Gauging Date:	4/2/18		11/15/18		4/15/19		11/22/19		4/13/20		11/18/20		4/12/21		11/30/21	
		Elevation of Measuring Point (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)
MW-1	unknown	25.90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	unknown	25.38	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	unknown	25.31	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-101	9-19	26.75	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-102	6-16	18.89	7.58	11.31	--	--	7.21	11.68	--	--	7.37	11.52	--	--	8.13	10.76	--	--
MW-103	6-16	19.47	10.81	8.66	--	--	7.26	12.21	--	--	10.70	8.77	--	--	11.90	7.57	--	--
MW-104	5-15	17.67	9.21	8.46	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-105	19-29	38.84	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-106	9 - 19	26.33	--	--	--	--	--	--	--	--	--	--	--	--	NM- Flooded	--	--	--
MW-107	2 - 12	14.63	4.51	10.12	--	--	4.74	9.89	--	--	4.42	10.21	--	--	4.48	10.15	--	--
MW-108	2 - 12	12.74	4.05	8.69	--	--	3.95	8.79	--	--	3.86	8.88	--	--	4.05	8.69	--	--
MW-109	3 - 13	24.12	10.51	13.61	--	--	10.62	13.5	--	--	10.41	13.71	--	--	11.31	12.81	--	--
MW-110	3 - 13	15.58	--	--	--	--	--	--	--	--	--	--	--	--	1.99	13.59	--	--
MW-111	4 - 14	18.95	NF	NF	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-112	3 - 10	18.16	--	--	--	--	5.05	13.11	--	--	6.75	11.41	--	--	8.06	10.1	--	--
MW-112a	4-19	17.78	--	--	13.09	4.69	12.3	5.48	13.00	4.78	12.75	5.03	13.08	4.70	13.05	4.73	12.80	4.98
MW-113	10-20	26.16	11.35	14.81	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-114	7-17	29.43	11.29	18.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-115	10-25	27.15	17.66	9.49	--	--	16.96	10.19	--	--	17.89	9.26	--	--	19.4	7.75	--	--
MW-116	5-15	13.45	9.14	4.31	--	--	8.35	5.1	--	--	9.17	4.28	--	--	9.51	3.94	--	--
MW-117S	5 - 20	21.94	13.07	8.87	--	--	9.19	12.75	--	--	12.69	9.25	--	--	13.51	8.43	--	--
MW-117T	35 - 45	21.87	14.75	7.12	--	--	14.46	7.41	--	--	16.06	5.81	--	--	16.35	5.52	--	--
MW-117D	60 - 70	21.78	13.5	8.28	--	--	11.76	10.02	--	--	10.11	11.67	--	--	16.31	5.47	--	--
MW-118S	3 - 14	15.52	8.75	6.77	--	--	9.84	5.68	--	--	8.85	6.67	--	--	8.95	6.57	--	--
MW-118T	39.5 - 49.5	15.30	9.96	5.34	--	--	9.52	5.78	--	--	10.24	5.06	--	--	10.77	4.53	--	--
MW-118D	70 - 80	15.15	9.74	5.41	9.23	5.92	9.31	5.84	10.49	4.66	10.09	5.06	10.65	4.5	10.59	4.56	10.55	4.6
MW-119S	5 - 20	11.74	4.56	7.18	--	--	4.05	7.69	--	--	3.49	8.25	--	--	4.20	7.54	--	--
MW-119T	42 - 47	11.67	6.12	5.55	--	--	5.86	5.81	--	--	6.20	5.47	--	--	6.85	4.82	--	--
MW-120S	5 - 20	12.54	3.97	8.57	--	--	3.85	8.69	--	--	3.35	9.19	--	--	4.30	8.24	--	--
MW-120D	28 - 38	12.45	3.41	9.04	--	--	3.21	9.24	--	--	3.93	8.52	--	--	3.81	8.64	--	--
MW-121S	5 - 20	12.44	7.32	5.12	--	--	6.8	5.64	--	--	7.72	4.72	--	--	7.73	4.71	--	--
MW-121D	32 - 47	12.81	7.74	5.07	6.79	6.02	6.94	5.87	7.66	5.15	7.40	5.41	8	4.81	8.05	4.76	8.15	4.66
MW-122	4 - 16	16.42	13.13	3.29	13.17	3.25	12.81	3.61	13.15	3.27	13.01	3.41	13.11	3.31	13.02	3.4	13.1	3.32
GEO-1	5 - 20	25.88	11.11	14.77	--	--	11.1	14.78	--	--	10.40	15.48	--	--	11.01	14.87	--	--
GEO-2	5 - 20	26.54	11.83	14.71	--	--	12.98	13.56	--	--	11.11	15.43	--	--	12.26	14.28	--	--
GEO-3	5 - 20	25.64	10.79	14.85	--	--	11.06	14.58	--	--	10.36	15.28	--	--	ND-Bott at 11.15		--	--
GEO-4	4 - 19	21.69	11.20	10.49	--	--	10.72	10.97	--	--	11.41	10.28	--	--			12.41	9.28
GEO-5	5 - 20	20.14	10.2	9.94	--	--	7.55	12.59	--	--	11.32	8.82	--	--			12.26	7.88
GEO-6	5 - 20	17.62	8.67	8.95	--	--	8.23	9.39	--	--	11.62	6	--	--			12.21	5.41
SH-1	9 - 14	29.55	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-2	7 - 14	29.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-3	8 - 13	29.66	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-4	11 - 16	29.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-5	8 - 13	29.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-MW1	10 - 30	24.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SH-MW2	10 - 25	24.27	12.84	11.43	--	--	12.55	11.72	--	--	--	--	--	--	--	--	--	--
SH-MW3	10 - 24	22.31	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW201	11-21	27.51	13.34	14.17	--	--	12.92	14.59	--	--	12.00	15.51	--	--	12.69	14.82	--	--
MW202	10.5-20.5	27.82	12.86	14.96	--	--	13.3	14.52	--	--	12.31	15.51	--	--	12.99	14.83	--	--
MW203	6-18	21.80	12.98	8.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--

- General Notes:
- ft = feet.
 - bgs = below ground surface.
 - ID = identification.
 - GW = groundwater.
 - NAVD = North American Vertical Datum of 1988.
 - The top of the PVC riser was used as the measuring point for depth to groundwater.
 - "--" = Well not yet installed, abandoned, or not measured.

Table 9-1. Groundwater Elevations
Phase V Status Report No. 24 and Remedial Monitoring Report No. 39
50 Tufts Street
Somerville, Massachusetts

		Gauging Date:	4/12/22		11/29/22		4/17/23	
Monitoring Well ID	Well Screen Interval (ft bgs)	Elevation of Measuring Point (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)	Depth to GW (ft)	Elevation of GW (ft NAVD)
MW-1	unknown	25.90	--	--	--	--	--	--
MW-2	unknown	25.38	--	--	--	--	--	--
MW-3	unknown	25.31	--	--	--	--	--	--
MW-101	9-19	26.75	--	--	--	--	--	--
MW-102	6-16	18.89	--	--	--	--	8.18	10.71
MW-103	6-16	19.47	--	--	--	--	--	--
MW-104	5-15	17.67	--	--	--	--	--	--
MW-105	19-29	38.84	--	--	--	--	--	--
MW-106	9 - 19	26.33	--	--	--	--	--	--
MW-107	2 - 12	14.63	--	--	--	--	4.43	10.2
MW-108	2 - 12	12.74	--	--	--	--	4.34	8.4
MW-109	3 - 13	24.12	--	--	--	--	11.49	12.63
MW-110	3 - 13	15.58	--	--	--	--	2.5	13.08
MW-111	4 - 14	18.95	--	--	--	--	--	--
MW-112	3 - 10	18.16	--	--	--	--	--	--
MW-112a	4-19	17.78	12.55	5.23	12.81	4.97	12.67	5.11
MW-113	10-20	26.16	--	--	--	--	--	--
MW-114	7-17	29.43	--	--	--	--	--	--
MW-115	10-25	27.15	--	--	--	--	19.61	7.54
MW-116	5-15	13.45	9	4.45	--	--	9.03	4.42
MW-117S	5 - 20	21.94	12.8	9.14	--	--	11.19	10.75
MW-117T	35 - 45	21.87	16	5.87	--	--	16.1	5.77
MW-117D	60 - 70	21.78	15.6	6.18	--	--	16.07	5.71
MW-118S	3 - 14	15.52	9.1	6.42	--	--	9.17	6.35
MW-118T	39.5 - 49.5	15.30	10.6	4.7	--	--	10.6	4.7
MW-118D	70 - 80	15.15	10.2	4.95	10.97	4.18	10.5	4.65
MW-119S	5 - 20	11.74	4.05	7.69	--	--	5.1	6.64
MW-119T	42 - 47	11.67	6.7	4.97	--	--	6.73	4.94
MW-120S	5 - 20	12.54	5	7.54	--	--	4.31	8.23
MW-120D	28 - 38	12.45	4.5	7.95	--	--	3.81	8.64
MW-121S	5 - 20	12.44	8	4.44	--	--	7.58	4.86
MW-121D	32 - 47	12.81	7.7	5.11	8.40	4.41	8.05	4.76
MW-122	4 - 16	16.42	12.9	3.52	13.15	3.27	13.1	3.32
GEO-1	5 - 20	25.88	10.85	15.03	--	--	11.16	14.72
GEO-2	5 - 20	26.54	12.2	14.34	--	--	12.1	14.44
GEO-3	5 - 20	25.64	--	--	--	--	--	--
GEO-4	4 - 19	21.69	--	--	--	--	12.83	8.86
GEO-5	5 - 20	20.14	--	--	--	--	12.79	7.35
GEO-6	5 - 20	17.62	--	--	--	--	12.75	4.87
SH-1	9 - 14	29.55	--	--	--	--	--	--
SH-2	7 - 14	29.64	--	--	--	--	--	--
SH-3	8 - 13	29.66	--	--	--	--	--	--
SH-4	11 - 16	29.63	--	--	--	--	--	--
SH-5	8 - 13	29.63	--	--	--	--	--	--
SH-MW1	10 - 30	24.02	--	--	--	--	--	--
SH-MW2	10 - 25	24.27	--	--	--	--	--	--
SH-MW3	10 - 24	22.31	--	--	--	--	--	--
MW201	11-21	27.51	--	--	--	--	13.84	13.67
MW202	10.5-20.5	27.82	12.9	14.92	--	--	13.2	14.62
MW203	6-18	21.80	--	--	--	--	--	--

- General Notes:
1. ft = feet.
 2. bgs = below ground surface.
 3. ID = identification.
 4. GW = groundwater.
 5. NAVD = North American Vertical Datum of 1988.
 6. The top of the PVC riser was used as the measuring point for depth to groundwater.
 7. "--" = Well not yet installed, abandoned, or not measured.

**Table 4-2. Chemical Testing Results - GEI Groundwater Sampling
Phase V Status Report No. 24 and Remedial Monitoring Report No. 39
50 Tufts Street
Somerville, Massachusetts**

[illegible]

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes refer to the laboratory data reports.
2. ft bgs = feet below ground surface.
3. µg/l = micrograms per liter.
4. " $<$ " = The Analyte was not detected at a concentration above the specified reporting limit.
5. SHA = Sanborn Head & Associates.
6. FD = Field Duplicate Sample.
7. NT = Not Tested.

Qualifying Notes:

- | | |
|----|---|
| B | The analyte found in associated method blank. |
| C+ | The result has a high bias due to surrogate spike recovery above upper control limits |
| E | The value exceeds the calibration range. |
| F+ | The result has a high bias due to matrix spike recovery above upper control limits. |
| F- | The result has a low bias due to matrix spike recovery below lower control limits. |
| G | The result is estimated due to duplicate precision outside control limits. |
| J | The reported result is below the laboratory reporting limit and is estimated. |
| J+ | The reported result is estimated. |
| K- | The result has a low bias due to blank spike or laboratory control sample recovery below lower control limits. |
| K+ | The result has a high bias due to blank spike or laboratory control sample recovery above upper control limits. |
| R | The result is rejected due to gross exceedence of minimum response factor criteria. |

Table 4-2. Chemical Testing Results - GEI Groundwater Sampling
Phase V Status Report No. 24 and Remedial Monitoring Report No. 39
50 Tufts Street
Somerville, Massachusetts

Sample Location: Sample Name: Well Screen Interval (ft bgs): Sample Date: Collected By:			GEO-5					GEO-6							MW-1					MW101					MW102					MW103																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
			GEO-5 5 to 20 8/16/04	GEO-5 5 to 20 5/24/06	GEO-5 5 to 20 10/4/06	GEO-5 5 to 20 1/16/07	GEO-5 5 to 20 4/16/07	GEO-6 5 to 20 8/16/04	GEO-6 5 to 20 5/24/06	GEO-6 5 to 20 10/4/06	GEO-6 5 to 20 1/16/07	GEO-6 5 to 20 1/16/07	GEO-6 5 to 20 4/16/07	GEO-6 5 to 20 4/16/07	MW-1 Unknown 7/1/02	MW-1 Unknown 8/9/04	MW-1 Unknown 5/23/06	MW-1 Unknown 1/17/07	MW-1 Unknown 4/17/07	MW101 9 to 19 5/24/06	MW101 9 to 19 10/5/06	MW101 9 to 19 1/17/07	MW101 9 to 19 4/13/07	MW900 9 to 19 4/13/07	MW102 6 to 16 5/24/06	MW102 6 to 16 10/5/06	MW102 6 to 16 1/16/07	MW102 6 to 16 4/13/07	MW102 6 to 16 7/18/07	MW102 6 to 16 10/10/07	MW102 6 to 16 4/17/08	MW102 6 to 16 1/18/07	MW102 6 to 16 4/17/08	MW103 6 to 16 5/24/06	MW103 6 to 16 8/7/06	MW103 6 to 16 10/5/06	MW103 6 to 16 1/16/07	MW103 6 to 16 1/16/07	MW103 6 to 16 4/13/07																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
Analyte	Method	Units	Geolnsight	GEI	GEI	GEI	GEI	Geolnsight	GEI	GEI	GEI	GEI	GEI	GEI	SHA	Geolnsight	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
Volatile Organic Compounds (VOCs)			8260	µg/l	< 2000	< 5.0	< 5.0	< 250	< 5.0	< 200	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.000	< 40000	40.0	36.1	< 2500	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	<

**Table 4-2. Chemical Testing Results - GEI Groundwater Sampling
Phase V Status Report No. 24 and Remedial Monitoring Report No. 39
50 Tufts Street
Somerville, Massachusetts**

[illegible]

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes refer to the laboratory data reports.
2. ft bgs = feet below ground surface.
3. µg/l = micrograms per liter.
4. " $<$ " = The analyte was not detected at a concentration above the specified reporting limit.
5. SHA = Sanborn Head & Associates.
6. FD = Field Duplicate Sample.
7. NT = Not Tested.

Qualifying Notes:

- | | |
|----|---|
| B | The analyte found in associated method blank. |
| C+ | The result has a high bias due to surrogate spike recovery above upper control limits |
| E | The value exceeds the calibration range. |
| F+ | The result has a high bias due to matrix spike recovery above upper control limits. |
| F- | The result has a low bias due to matrix spike recovery below lower control limits. |
| G | The result is estimated due to duplicate precision outside control limits. |
| J | The reported result is below the laboratory reporting limit and is estimated. |
| J+ | The reported result is estimated. |
| K- | The result has a low bias due to blank spike or laboratory control sample recovery below lower control limits. |
| K+ | The result has a high bias due to blank spike or laboratory control sample recovery above upper control limits. |
| R | The result is rejected due to gross exceedence of minimum response factor criteria. |



APPENDIX G

CID PETITION



10 State Street, Suite 100
Woburn, MA 01801
781.932.9400 | oneatlas.com

May 10, 2024

DRAFT

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup
150 Presidential Way
Woburn, Massachusetts

**SUBJECT: Contained-In Determination
Soil from Tufts Street Right-of-Way
RTN 3-23246**

Dear Program Manager,

On behalf of City of Somerville, I have made a “contained-in” determination following the approach presented in the MassDEP’s Technical Update, Considerations for Managing Contaminated Soil: RCRA Land Disposal Restrictions and Contained-In Determination (2010) regarding soil from a portion of the following M.G.L. c. 21E disposal site:

RTN: 3-23246
Site Name: 50 Tufts Street and Property Across Street
Street Address: Tufts Street right-of-way
City/Town: Somerville, MA
Zip Code: 02145

The soil contained the listed hazardous waste constituent(s) with waste code U210, which MassDEP is authorized to regulate under the Resource Conservation and Recovery Act (RCRA) by the U.S. Environmental Protection Agency (USEPA). However, the soil (check one):

- ☒ Met all applicable S-1 standards upon removal*; or
☐ Was treated through a method of treatment other than dilution so as to meet all applicable S-1 standards.

*The soil noted herein has been pre-characterized in-situ and has been determined to meet applicable S-1 standards.

The levels of the listed hazardous waste constituents in the generated soil are:
Summary of Detected Listed Waste within Contained-In Determination

Sample ID	Sample Date	Substance/Compound	Results (ppm)	Applicable MCP Method 1 S-1 Standard		
				S-1 Soil & GW-1	S-1 Soil & GW-2	S-1 Soil & GW-3
ATC-8, 5'-10'	3/14/2024	Tetrachloroethylene (127-18-4)	0.0134	1 ppm	10 ppm	30 ppm



The City of Somerville Tufts Street Improvement Project is planning to reconstruct sidewalks and repave Tufts Street between Cross Street and Washington Street as part of the City's Pavement and Sidewalk Management Program. As part of this project soil less than 10 feet below grade will be generated for offsite disposal primarily from the installation of drainage structures and sidewalks. As shown on the attached Atlas annotated Phase V ROS Site Plan (GEI, August 2023), the majority of Tufts Street right of way is located within a disposal site listed by the Massachusetts Department of Environmental Protection (MassDEP) Bureau of Waste Site Cleanup (BWSC) under Release Tracking Number (RTN) 3-23246. This disposal site is associated with a release of tetrachloroethylene, also known as perchloroethylene (PCE), to soil and groundwater from a former drycleaner facility located at the abutting 50 Tufts Street property. The vertical extent of the disposal site begins just below the pavement surface and extends to at least 10 feet below grade.

On March 14 and 15, 2024, Atlas supervised the installation of 8 borings for sampling and laboratory analyses of soil to conduct in-situ pre-characterization of soil within Tufts Street for future potential off-site disposal associated with the Tufts Street Improvements Project. Two soil samples from each boring, for a total of sixteen (16) soil samples were collected under the supervision of Atlas from borings identified as ATC-1 to ATC-8 within the Tufts Street right-of-way between Cross Street and Washington Street. As shown on the attached August 2023 Phase V ROS Site Plan and Atlas annotated Tufts Street Construction Concept Plan, borings ATC-4 to ATC-8 are located within the disposal site while boring ATC-3 is located at the approximate northeast edge of the disposal and borings ATC-1 and ATC-2 are located outside the disposal site. At each boring location, discrete soil samples were collected by hand auger during preclearing from 0 to 5 feet below grade surface and in dedicated acetate liners using a Geoprobe drill rig from 5 to 10 feet below grade surface.

Soil samples from each boring were screened for total volatile organic compounds (VOCs), i.e., headspace, with a pre-calibrated photoionization detector (PID) in accordance with the MassDEP jar headspace method.

The sixteen samples were placed in laboratory provided containers and submitted to Eurofins laboratory under a chain of custody for analyzed for low level volatile organic compounds (VOCs) by EPA Method 8260. As summarized in the attached Tufts Street Borings Soil Analytical Summary table, the results were non-detect for all VOCs at 15 of 16 samples. Only PCE at 0.0314 milligrams per kilogram (mg/kg) was detected in soil from boring ATC-8, 5-10 feet below grade surface.

In addition to the above described discrete soil analyses of VOCs by 8260, two sets of composite soil samples, one set (ATC-1 to ATC-8 Composite 0-5') from the 0 to 5 foot below grade surface interval and the other set (ATC-1 to ATC-8 Composite 5-10') from the 5 to 10 foot below grade surface interval from each of the 8 borings, were submitted in properly preserved laboratory provided containers to Eurofins laboratory for the following analyses typically required by soil management facilities for disposal or recycling at those facilities: Semi-VOCs with low level PAHs (SIMS) by EPA Method 8270; PCBs by EPA Method 8082; RCRA 8 Metals; TCLP lead; Total Petroleum Hydrocarbons by 8100; Corrosivity; Total Organic Carbon; Flashpoint; Reactivity Cyanide and Sulfide; and Conductivity.

As presented in the Tufts Street Borings Soil Analytical Summary table, the results of the soil analyses do not exhibit any characteristics of hazardous waste pursuant to 310 CMR 30.120. The only soil sample that contained a detectable concentration of PCE (0.0134 mg/Kg at ATC-8, 5-10') as well the other soil analyses for the disposal site VOCs whose laboratory method reportable limits were also below S-1 standards within the disposal site area are eligible for a contained-in determination.

The soil management activities associated with this CID Petition will be conducted as a Utility-related Release Abatement Measure (URAM).

I understand that this "contained-in" determination is subject to a 21-day period during which the determination is subject to review by the MassDEP and that the soil cannot be handled as non-hazardous waste until the 21-day review period passes without objection from MassDEP or USEPA.

I also understand that if the soil is to be transported out-of-state, it must first be determined if the operator of the landfill or other receiving facility and the relevant state agency (or the relevant USEPA region, if the state does not administer the RCRA program) are willing to accept contained-in determinations performed by a



Massachusetts Licensed Site Professional. In doing so, the process by which “contained-in” determinations are performed in Massachusetts will be explained to the relevant parties and proper documentation of all conversations will be retained.

I, Stephan Landry, attest under the pains and penalties of perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this submittal, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the person or entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate or incomplete information.

Respectfully submitted,

ATLAS TECHNICAL CONSULTANTS LLC

DRAFT

By:

Signature

Date

LSP #: 2858

LSP Name: Stephan Landry, LSP

Telephone: 781-404-1431 (office); 603-674-9159 (cell)

For: City of Somerville

Name of person or entity

Attachment: Atlas Annotated August 2023 GEI Phase V ROS Site Plan
Atlas Annotated City Somerville 2024 Tufts Street Construction Concept Plan
Tufts Street Borings Soil Data Summary Table
MassDEP transmittal form BWSC-126
Laboratory Analytical Report

Distribution: Rebecca Wright, P.E., City of Somerville, rwright@somervillema.gov

File: cid petition rtn 3-23246 city somerville tufts street improvements 5-10-2024

SPECIFICATIONS FOR 2025 TUFTS STREET IMPROVEMENTS PROJECT AND ADDITIONAL WORK LOCATIONS

SCOPE OF WORK

The work to be performed under this contract shall consist of the reconstruction of Tufts Street and select intersections, sidewalk and specific repairs at select locations, and mill & overlay of a public street in Somerville, Massachusetts.

1. The reconstruction of Tufts Street extending from Washington Street to Cross Street. See **Attachment A** for Complete Streets Improvement Plans
 - a. Tufts Street is a known location for contaminated soil, see **Attachment B** for Environmental Site Conditions Summary Tufts Street Improvements Project
 - b. Storage area for the contaminated soils will be provided by the City within ¼ mile of project area.
 - c. Licensed Site Professional (LSP) Services will be provided by the City.
2. Sidewalk replacement following locations. See **Attachment C** for limits of reconstruction.
 - a. Webster Avenue
 - b. Knowlton Street
3. Accessible Curb Ramps and Crossings at the following locations. Select locations also include crosswalks. See **Attachment D** for more detail on ramp and crosswalk location.
 - a. 68 Glen Street
 - b. Benedict Avenue
 - c. Clark Street and Newton Street
 - d. Franklin Street and Oliver Street
 - e. Glen Street and Fountain Avenue
 - f. Glen Street and Webster Street
 - g. Concord Avenue
4. Accessible parking Ramp at the following location. See **Attachment E** for more detail on ramp location.
 - a. Bonair Street
5. A total of 20 HMA Speed Humps at locations to be determined by the engineer

The work includes excavation, gravel borrow, grading, drainage modifications, manhole adjustments, drainage inlet reconstruction, curb removal and resetting, curb extensions, installation of MAAB/ADA compliant curb cuts, crosswalk lines, stop lines, colored lane markings and all other incidental work listed in the proposal. Layout and design plans will be provided following notice to proceed where substantive change to the existing street layout is proposed.

PROVISION FOR TRAVEL AND PROSECUTION OF THE WORK

The street and adjacent side streets shall remain open to travel throughout the period required for the completion of the improvement except as permitted by the City of Somerville Traffic Commission. Reasonable facilities shall be provided by the Contractor for the convenient and safe passage of pedestrians through the project and also to and from properties abutting the

improvement. Reasonable facilities shall also be provided by the Contractor to ensure that all businesses remain accessible during business hours. Particular care shall be taken at all times to establish and maintain such methods of procedure as will not create hazards of an unusual nature.

LIMITATIONS OF OPERATIONS

The Contractor shall conduct the work at all times in such a manner and in such sequence as will assure the least interference with traffic and abutters. The Contractor shall have due regard to the location of detours and to the provisions for handling traffic. The Contractor shall not open up work to the prejudice or detriment of work already started. The Contractor shall have due regard to the potential conflict between existing features (e.g., pavement markings, signs, curb, etc.) and interim/proposed features (e.g., pavement markings, signs, curb, etc.) and shall provide temporary transitions between those features that results in reasonably safe and convenient travel in accordance with Subsection 7.09: Public Safety and Convenience of the Standard Specifications.

WORK SCHEDULE

Work on this project is mainly restricted to a ten-hour day, five-day week with the Prime Contractor and all subcontractors working on the same shift from 7am to 5pm. Peak hour work restrictions may apply as specified in the Street Permit or as directed by the Engineer.

Project includes biweekly project meetings between the Contractor, subcontractor(s), project engineer and City Engineer. The frequency and location will be determined by the City Engineer during the project and may be changed as construction progresses.

LIQUIDATED DAMAGES

Delays to due to the cancellation of work, not including of inclement weather, will be subject to the assessment of liquidated damages as outlined below. A verbal warning will be given to the Contractor's supervisor and a written warning will be sent to the Contractor for the first offense. Every offense thereafter will be penalized as follows:

1. The Contractor agrees that the City of Somerville may retain the sum of \$250.00 from the amount of the compensation for the each 60 minutes (1 hour) of late arrival by the contractor at the predetermined meeting location.
2. Any cancellation by the Contractor within five hours of a scheduled shift will result in the Contractor compensating the Engineering Department for a sum of \$2,000.00.
3. If the Contractor hasn't completed any shifts for a total of two weeks in the same construction season due to inadequate personnel availability, then damages may be assessed for subsequent weeks without completed work due to inadequate workforce availability occurring at a weekly rate of \$4,000.00.

If the Contractor has an outstanding invoice with the City of Somerville, the corresponding sums from liquidated damages mentioned above will be deducted from that invoice, otherwise the Contractor shall remit this payment within fourteen calendar days.

DISPOSAL OF SURPLUS MATERIAL

Surplus material, unless excavated from the known contaminated areas ad outlined in Attachment B, resulting from the various kinds of excavation and not required for use on the project shall be disposed of by the Contractor, outside the project limits, at their own responsibility and without additional compensation thereof.

REMOVAL AND DISPOSAL OF STRUCTURES AND OBSTRUCTIONS

The Contractor shall accept and hold entire responsibility for the stacking and protection of materials that have been removed from the site and that are to be reused in the work. Any materials lost or damaged through lack of protection or carelessness by the Contractor shall be replaced at their expense.

SEQUENCE OF WORK

Provide a monthly work schedule for the entire project at the beginning of the project. Provide a weekly schedule for the next two months of work. Update schedule biweekly.

After a street is cold planed/milled, it shall remain open for a maximum of five (5) working days prior to repaving. After removal of sidewalk, it shall remain open for a maximum of ten (10) working days prior to replacement. However, due to special circumstances, this requirement may be waived by the City Engineer.

Construction sequence for sidewalk and accessible ramp construction shall be set to provide an accessible path consistent with the existing pedestrian facility that is disrupted or closed with the following expectations:

1. Sidewalk construction within a block shall be limited to one side of the road at a time.
2. Accessible pedestrian ramp construction shall be limited to one corner of an intersection at a time.
3. At the end of every working day, the Contractor shall ensure an accessible route is present.
4. A Pedestrian Management Plan shall be submitted for review two weeks prior to first scheduled sidewalk removal/obstruction. The Pedestrian Management plan shall be both narrative and graphical and shall be specific to the streets and intersections of the Project. The Pedestrian Management Plan shall provide requirements to meet (e.g. continuous accessible route through Project at all times, etc.).
5. Shop Drawings: Within 30 days after the date of the Notice To Proceed, the Contractor shall submit shop drawings for signal supports, a list of equipment, and manufacturer's equipment specifications to the Engineer in accordance with the relevant provisions of Section 815.20. No work shall commence by the Contractor until approval of the shop drawings and manufacturer's data has been received in writing from the Engineer. Approval of these drawings will be general in character and shall not relieve the Contractor from the responsibility of, or the necessity of, furnishing materials and workmanship conforming to the plans, standard specifications, and these special provisions.

Per MassDOT Standard Details for the Development of Temporary Traffic Control Plans, when existing pedestrian facilities are disrupted, closed, or relocated in a temporary traffic control zone, temporary facilities shall be provided and they shall be detectable and include accessibility features consistent with the features present in the existing pedestrian facility.

COOPERATION OF THE CONTRACTOR

Attention is directed to the fact that the Public Service Corporations and Municipal Departments may enter the site of the improvement and alter, replace, and/or install facilities at some time when the Contractor will be prosecuting other work contiguous thereto.

PROTECTION AND RESTORATION OF PROPERTY

Special care shall be exercised by the Contractor during the prosecution of the work, to save from harm and injury any structure, public or private, water system situated above or below the surface, and adjacent properties lying within the scope of the project, not specifically designated to be removed or otherwise altered.

Any damage to private property due to the construction activities of the Contractor shall be repaired to the property owner's satisfaction within thirty (30) working days.

STREET TREES

Existing trees shall be retained unless otherwise noted on plans, and their roots protected at all times during construction.

SIDEWALKS, DRIVEWAYS AND ACCESSIBLE CURB CUTS

The Contractor shall be responsible for protection of newly placed cement concrete sidewalks, driveways, and accessible curb cuts (pedestrian curb ramps) from vandalism. The Contractor shall not be reimbursed for repairing or replacing concrete walks as a result of vandalism.

BACKFILLING FOR STRUCTURES AND PIPES

All backfilling for structures and pipes shall conform to the Commonwealth of Massachusetts Department of Transportation Standard Specification for Highways and Bridges, 2021 Edition, Section 150.64.

RETAINAGE

A Retainage of 5% shall be held by the City. This sum shall be held by the City for a period of sixty (60) days after final estimate is made and the work is accepted by the City.

All unit prices quoted herein shall be firm for the duration of the Contract, regardless of any changes in the cost of materials or labor.

CONTRACTOR'S EQUIPMENT STORAGE

Contractor's equipment is not to be parked or stored at the Public Works Yard at any time.

NOTICE TO OWNERS OR UTILITIES

Written notice shall be given by the Contractor to all public service corporations or officials owning or having charge of publicly or privately owned utilities of the Contractor's intention to commence operations affecting such utilities at least one week in advance of the commencement of such operations, and the Contractor shall, at the same time, file a copy of such notice with the City Engineer.

Bidders are hereby notified that information is available regarding the existing utility structures which may be encountered within and adjacent to the limits of the work and the corporations owning controlling same. The completeness of this list is not guaranteed by the Department.

City of Somerville
Department of Public Works
Superintendent of Operations
Attn.: Eric Weisman
Superintendent of Lights & Lines
Attn.: Mark Lawhorne
One Franey Road
Somerville, MA 02145
617-625-6600

Broomfield, CO 80021

MWRA Water & Sewer Division
Charlestown Navy Yard
100 First Ave.
Boston, MA 02129
617-242-6000

City of Somerville
Water & Sewer Department
Water Division
Attn.: Kimberly Abraham
(Acting W&S Director)
Sewer Division
Attn.: Jay Hayden
One Franey Road
Somerville, MA 02145
617-625-6600

City of Somerville
Parking Department
133 Holland St.
Somerville, MA 02144
617-625-660

Comcast Communications
Attn.: Dave Flewelling
617-279-7864
9 Forbes Ave.
Woburn, MA 01801

Level 3 Communications, LLC
Michael Mugo
978-908-0313
1025 Eldorado Blvd

Eversource Energy
Eversource Gas
Attn.: Roger Carson
781-346-7651

Eversource Electric
Attn.: Brian Lozier
339-987-8378

101 Linwood Street
Somerville, MA 02143

National Grid Gas
Attn.: Matthew Carmody
781-790-6062
170 Medford St.
Malden, MA 02148

Verizon Communications
Attn.: Paul Diamantopoulos
978-323-0282
185 Franklin St.
Boston, MA 02210

RCN Communications
Attn.: Kenny Bates
617-293-0201
115 West First St.
Boston, MA 02127

The Contractor shall notify Massachusetts "DIG SAFE" 72 hours prior to start of construction.

"DIG SAFE" call center: 1-888-DIGSAFE or 1-888-344-7233.

Utility Release Abatement Measure Specifications

The majority of the Tufts Street right of way work area is located within a Massachusetts Contingency Plan (MCP, 310 CMR 40.0000) defined Disposal Site listed by the Massachusetts Department of Environmental Protection (MassDEP) Bureau of Waste Site Cleanup (BWSC) under Release Tracking Number (RTN) 3-23246. The horizontal extent of the Disposal Site within the work area is shown on the Contract Drawings. This Disposal Site is associated with a release of chlorinated volatile organic compounds (CVOC) to soil and groundwater from a former drycleaner facility located at the abutting 50 Tufts Street property. The vertical extent of this Disposal Site begins just below the pavement surface and extends to at least 10 feet below grade.

All subsurface work will be performed within the Disposal Site as a Utility Release Abatement Measure (URAM) per 310 CMR 40,0460. All soil and groundwater from the portion of the work area within the Disposal Site for RTN 3-23246 will be covered by the URAM and performed under an Environmental Health and Safety Program. The City of Somerville (City) will provide required Licensed Site Professional (LSP) services.

BOND REQUIREMENTS

A Performance Bond and a Labor and Materials Bond in the amount of 100% each of the contract price will be required from the successful bidder.

PREVAILING WAGE REQUIREMENTS

Bidders will be required to comply with the Prevailing Wage Laws, M.G.L., C.149. The selected Contractor will be required to submit a certified payroll to the City every week. The City will take an active role in reviewing and monitoring this payroll weekly. If the City suspects any violations, the City will report them to the Attorney General's Fair Labor and Business Practices Division. The Attorney General's Office, after conducting an investigation and a hearing can order the bidder to halt work, if it finds prevailing wage violations. Within fifteen days after completion of its portion of the work the bidder must submit a Statement of Compliance with the prevailing wage law. The City reserves the right to conduct hearings on bids that are significantly below the average bid price submitted on a project, to make findings of fact and determinations. Weekly payrolls are public records, and the bidder shall make them available upon request. The Bidder is required to keep these records for a period of three years from the date of the completion of this contract.

INSURANCE REQUIREMENTS

(See attached)

PARTICULAR SPECIFICATIONS

ITEMS

The items below shall conform to the Commonwealth of Massachusetts, Department of Transportation Standard Specifications for Highway and Bridges, 2023 Edition including the latest amendments and addendum thereto, except brick work as described in Item 706. and Traffic Police as described in Item 999.001.

The quantity of items listed, are approximate only. They are given as a basis for comparison of bids. The City does not expressly or by implication agree that the actual amount of work will correspond therewith. The City reserves the right to increase or decrease the quantity of any bid item.

An increase or decrease in the quantity of any items shall not be regarded as cause for an increase or decrease in the contract unit price. Contractor waives their right to renegotiate bid unit pricing based on quantity changes.

ITEM 102.511

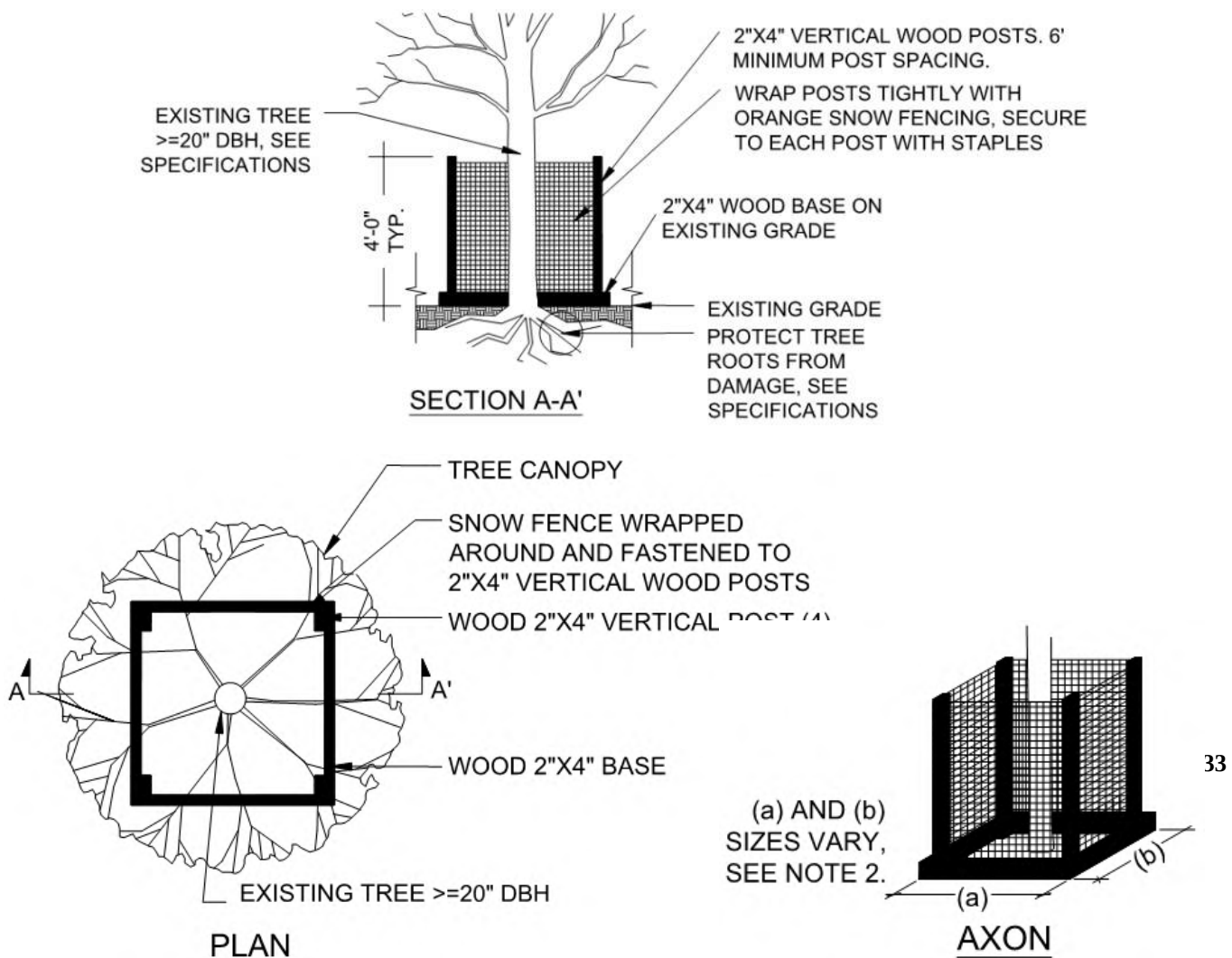
TREE PROTECTION – ARMORING & PRUNING

EACH

ITEM 102.521

TREE AND PLANT PROTECTION FENCE

FOOT



NOTES:

1. TREE BOX RESTS ON EXISTING GRADE AND IS NOT ANCHORED TO THE GROUND.
2. SIZE OF TREE PROTECTION BOX VARIES BASED UPON TRUNK SIZE AND LIMITS OF SURFACE ROOTS. FINAL SIZE TO BE DETERMINED BY CITY URBAN FORESTER IN FIELD DURING PRE-CONSTRUCTION SITE WALK.
3. TREE PROTECTION SHALL BE INSTALLED PRIOR TO ANY CONSTRUCTION ACTIVITIES AND MAINTAINED IN GOOD CONDITION THROUGHOUT THE CONSTRUCTION PERIOD.
4. SUBMIT SHOP DRAWINGS SHOWING ALL MATERIALS AND ATTACHMENTS.
5. TREES HAVING A CALIPER UNDER 20" DIAMETER AT BREAST HEIGHT (DBH) SHALL BE WRAPPED WITH TREE PROTECTION LUMBER. "SPECIAL MATURE TREES", THOSE TREES WITH A CALIPER OVER 20" DBH, SHALL BE WRAPPED WITH TREE PROTECTION LUMBER AND PROTECTED WITH A TREE BOX. TREE BOX SHALL BE OMITTED WHEN IT IMPEDES ADJACENT SIDEWALK CONSTRUCTION OR WHEN AN ADA ACCESSIBLE PATH CANNOT BE PROVIDED AROUND IT.
6. CONTRACTOR SHALL PROTECT PRIVATE TREES, PORCHES, AND PRIVATE SIDEWALKS DURING WORK AND RESTORATION.

The work to be done hereunder consists of protecting trees in accordance with the relevant provisions of Section 100 and the following.

PART 1 – GENERAL SUMMARY

1.1 This section includes the following:

1. Provide labor, material, tools and equipment to prepare site as indicated and specified.
2. Protection of existing trees and vegetation within the limit of work. Tree Protection should be assumed for existing trees within the project limit of work where proposed construction activity is to occur beneath the canopy and within the drip lines of existing trees. Tree protection shall remain in place throughout the duration of the construction project but may be temporarily relocated to allow for work in select areas in close proximity to the trees to occur as approved by the Owner's Representative. Tree protection shall be promptly restored following these select work operations. The measures described herein are anticipated to be required and will be verified based on actual field conditions. Provisions under this item include: tree protection measures to minimize disturbance to existing trees and their root systems; canopy system review and evaluation; canopy pruning in areas of proposed disturbance; and post-pruning care including mulching and watering of root zones.

PART 2 – PRODUCTS

2.1 TREE BOX

- A. Tree Box shall be constructed from 2 in. x 4 in. lumber creating a box around the b the tree pit with 2 in. x 4 in. lumber standing straight up at the corners and wrapped with orange snow fence. Fasteners as per detail.

2.2 TREE TRUNK WRAPPING PROTECTION LUMBER

- A. Tree Trunk Wrapping Protection Lumber shall consist of 2 in. x 4 in. and 8 ft. height lumber wired together in close spacing with 16-gauge galvanized steel wire to form a protective enclosure around tree trunks. See photo examples of tree wrap protection in Section 3.6.

2.3 WOOD CHIPS

- A. Wood Chips shall conform to provisions of Wood Chip Mulch under Materials Section M6.04.3 of the MassDOT Standard Specifications.

2.4 WATER

- A. Water shall be furnished by Contractor, suitable for irrigation and free from ingredients harmful to plant life. Hose and other watering equipment required for work shall be furnished by Contractor.

PART 3 - EXECUTION

3.1 EXISTING TREES AND VEGETATION

- A. Contractor shall be responsible for the health of the existing trees in the immediate vicinity of construction. Trees damaged by construction operations which, as determined by the Owner's Representative, can be remedied by corrective pruning measures shall be addressed immediately.
- B. Public trees are protected by Massachusetts State Law, Chapter 87. Section 12 states that a fine of up to five hundred dollars, (\$500.00) per incident of damage to public shade trees can be levied. Each branch broken or improperly pruned, each improper wounding of the trunks of the trees, and each root improperly pruned shall constitute an infraction. Section 12 further provides that anyone who negligently or willfully damages a tree will be liable to the City for all damages.
- C. If the City's Urban Forester determines that a private or public property tree

cannot be repaired and restored to full-growth status, the Contractor shall replace the damaged tree(s) and pay liquidated damages as noted below.

- a. The size of the replacement tree shall equal $\frac{1}{2}$ " caliper for every 1" caliper inch of the damaged tree (size of the damaged tree shall be measured, the new tree shall be based on nursery measurements). In the case that a replacement tree of that size cannot be found or cannot be planted, a number of trees with the combined DBH of the required replacement tree may be substituted, upon approval of the City Urban Forester. The species of the replacement tree(s) shall be determined by the Engineer and the City Urban Forester.
 - b. In addition to providing a new tree replacement, Contractor shall pay City \$250.00 for every caliper inch of a damaged tree within limits of public property.
 - c. An example of the conditions stated above: A 20" caliper public tree was damaged and determined to need replacement. To remedy this situation, the Contractor would purchase and install a 10" caliper tree (or multiple trees with combined caliper inches of 10") and pay the Owner \$5,000. Type of tree and installation specifications to be determined and signed off by the City Urban Forester.
 - d. The total cost of tree replacement, including the cost of the tree and stump removal, shall be borne by the Contractor.
- D. The Contractor shall prune City and private trees within the limit of work under the direction of a Massachusetts Certified Arborist and only as required by the Engineer and with the supervision of the City's Urban Forester.
- a. If a condition is observed requiring attention, the condition should be reported to the City within 24 hours. Such conditions may include structural weakness, rot or decay that cannot be corrected by cleaning, and dead trees.
 - b. Equipment and work practices that damage living tissue and bark beyond the scope of work shall be avoided. Climbing spurs shall not be used when climbing and pruning trees. Spurs may be used to reach an injured climber or when removing a tree.
 - c. Pruning tools (e.g. chain saws, pole saws, hand saws, pole pruners, etc.) shall be sharp and regularly sharpened and maintained throughout the Contract Term.

- d. Not more than 25% of the foliage of an individual tree should be removed within an annual growing season. The percentage and distribution of foliage to be removed shall vary according to the tree species, age, health and site, in accordance with the types of pruning identified above.
 - e. Not more than 25% of the foliage of a branch or limb shall be removed when it is cut back to a lateral. The lateral shall be large enough to assume apical dominance.
 - f. Heading shall be permitted only by the expressed permission of the City, when needed to reach a defined objective.
 - g. Topping and lion tailing shall be considered unacceptable pruning practices.
 - h. All pruning cuts shall be made in accordance with the American National Standard for Tree Care Operations—Standard Practices (ANSI A300 Part 1), as approved by the American National Standards Institute, and published by the National Arborists Association (revised 2001). All terminology included in these Technical Specifications shall be defined by ANSI A300 Part 1.
 - i. When tracing wounds, only loose, damaged tissue should be removed. No other wound treatments shall be used.
- E. Roots that cannot be avoided during construction for all other trees to remain shall be carefully and cleanly cut. Only hand methods for grubbing roots will be accepted inside drip lines of trees to be left standing. All pruning of any roots greater than 2" must be completed under the supervision of the City Urban Forester. Root pruning shall include application of root treatment or fertilizer as required. In order to minimize impacts to roots, Contractor shall uncover roots with an air spade as required by the City's Urban Forester.
- F. Trucks and heavy equipment shall not pass over or park on roots of trees; nor shall construction materials, debris, or excavated material be stored within drip line of trees or within tree pits. For occasional or one time access over roots, ½-inch plywood overlapped may be used. Permeable materials such as gravel or wood chips shall be placed over root systems of trees which are not covered by hardscape and over which trucks and heavy equipment must travel during construction operations, when such travel is unavoidable, to prevent soil compaction and root damage. Material shall be replaced as needed. Contractor must have prior approval for access from the Owner's Representative or City Urban Forester.
- G. During sidewalk construction adjacent to trees, suitable soil shall be maintained within tree wells. Moist soil or mulch shall also be maintained around surface roots outside of tree wells which may become exposed during construction. Such covering shall be placed as soon as possible after roots are exposed. If roots are

going to be exposed for more than one hour, cover roots with damp burlap. Burlap shall be kept moist until most soil and mulch can be used for permanent cover.

- H. Tunneling shall be the preferred method of excavation adjacent to tree roots to avoid root pruning. If root pruning is unavoidable, a certified arborist shall be onsite to execute or oversee the operation with sufficiently sharpened hand tools and in such a fashion as to have minimum negative impact on tree health and safety.
- I. All tree protection fencing must be installed and approved by the Owner's Representative and the City Tree Warden or City Urban Forester before site preparation or other construction activity commences. Any modifications to tree protection fencing during construction can only take place with advanced written approval from the Owner's Representative and the City Tree Warden or City Urban Forester.
- J. Provide protection necessary to prevent damage to existing trees and improvements indicated to remain in place inside or outside of the limit of work. Existing trees and shrubbery to remain shall be protected from injury. Except as otherwise approved, cutting and trimming of existing tree limbs and roots will not be permitted. Existing trees to remain which can potentially be damaged by construction operations shall be protected. Trees having a caliper under 20" diameter at breast height (dbh) shall be wrapped with tree protection lumber. "Special Mature Trees", those trees with a caliper over 20" dbh, shall be wrapped with tree protection lumber and protected with a tree box. Protection shall be maintained until completion of the work of the Contractor.
- K. Protect trees on adjoining properties and within City right-of-way. Restore trees damaged by Contractor's clearing and construction activities to their original condition or better, at no additional expense to the City.
- L. Protect existing trees and other vegetation as directed by the City Urban Forester to remain in place or outside of the clearing/grading limit lines.

3.6 TREE WRAP PROTECTION EXAMPLES



ITEM 103.
TREE REMOVED – DIAMETER UNDER 24 INCHES **EACH**

ITEM 104.
TREE REMOVED – DIAMETER 24 INCHES AND OVER **EACH**

ITEM 105.
STUMP REMOVED **EACH**

The work to be done hereunder consists of removing and disposing in accordance with the relevant provisions of Section 100.

ITEM 120.1
UNCLASSIFIED EXCAVATION **CUBIC YARD**

The work to be done hereunder consists of removing and disposing in accordance with the relevant provisions of Section 120, all the materials obstructing the execution of required work as shown in the plans and as directed, except those materials for which payment is made inclusive with complete work specified to be performed under items of this contract. Concrete gutters are included under this item and any concrete bases encountered in the roadway excavation. The Contractor's attention is directed to the fact that the materials shall be disposed of in accordance with the provisions written herein before under the heading "Disposal of Surplus Materials" at no additional compensation.

ITEM 120.2
HAND AND/OR PNEUMATIC EXCAVATION **CUBIC YARD**

The work done under this item shall conform to the relevant provisions of Section 120 of the Standard Specifications. The Contractor shall perform HAND AND/OR PNEUMATIC EXCAVATION in accordance with the plans, specifications, and direction of the City of Somerville's Tree Warden.

Intent

The intent of the item is to either hand excavate or excavate with a pneumatic air device in areas where trenching or other excavation is required within the drip line of existing trees and/or excavation around gas lines, conduit, utilities and other sensitive areas. These are areas, where in the opinion of the Tree Warden, use of a backhoe or tractor would not be appropriate.

Method

Prior to beginning work, the area to be trenched/excavated shall be thoroughly wetted, 24 hours in advance, to minimize dust to the greatest extent possible. Trenching/Excavation shall be accomplished either by hand or with a pneumatic device such as an Air-Spade® CGP System, as manufactured by AirSpade, Chicopee, MA, or approved equal. The Contractor shall provide a compressor unit for operating the pneumatic excavator rated at one hundred fifty standard cubic feet per minute (150 scfm) at ninety pounds per square foot gauge (90 psfg). All pneumatic excavation shall be as minimal as possible in width and depth, thereby minimizing the impact on tree roots and other areas where the Tree Warden determines that conventional

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Complete Streets Improvements Project

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machine excavation may be detrimental. Different nozzles may be used on the air spade to expedite the work or minimize the amount of airborne material. Depth shall be as indicated on Contract Drawings or as directed by the Tree Warden. Depths greater than 18" shall require removal of soil by hand shovel, or other appropriate means. Where a pneumatic device is used, care shall be taken to avoid rocks being scattered and inadvertently damaging private or public property. In addition, operators must be equipped with adequate protective clothing and gear, in accordance with their Health and Safety Plan. All tree roots exposed by the pneumatic or hand excavation operation must be kept constantly moist with burlap covered with white plastic and checked a minimum of two (2) times a day, once in the morning and once in the afternoon, for a maximum of forty-eight (48) hours, until backfill is complete as directed by the Tree Warden. If directed, use of tree bags filled with water shall be installed to facilitate properly moist conditions.

Necessary inspections of piping shall be scheduled in advance, especially those involving inspections performed by outside Agencies.

In cases where roots must be cut, the Contractor must receive written approval from Tree Warden prior to cutting any roots larger than one inch (1") in diameter. Roots must be cut cleanly with pruning shears, loppers, or pruning saws. All root cuts must be approved by the Tree Warden prior to backfilling.

Measurement and Payment

The quantity of HAND AND/OR PNEUMATIC EXCAVATION to be paid for under this Item shall be the number of CUBIC YARDS of material excavated and backfilled, as measured in its original position, in accordance with the plans, specifications, and directions of the Project Manager.

The price bid shall be a unit price per CUBIC YARD of Hand And/Or Pneumatic Excavation and shall include the cost of all labor, materials, and equipment, and incidentals necessary for the excavation, removal and disposal of excavated material, backfilling, compacting (if under paved surfaces) and other incidental work and expenses necessary to complete the work in accordance with the plans and specifications, to the satisfaction of the Project Manager.

ITEM 141.1

TEST PIT FOR EXPLORATION

CUBIC YARD

The work under this item shall conform to the relevant provisions of Section 140 of the Standard Specifications and the following:

All test pits shall be as directed or approved by the City Engineer.

All test pits must be coordinated with the City of Somerville's Department of Public Works. A representative of the City of Somerville's Department of Public Works shall specify the location and size of the test pit and shall be present during the excavation.

The test pit shall be backfilled with City of Somerville approved gravel borrow, placed in six (6") lifts and compacted to 95% of the maximum density.

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Complete Streets Improvements Project

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Bypass pumping, sheeting/shoring, dewatering, excavation, cutting existing pavement, bedding, backfilling, dust control, appurtenances, and the removal and disposal of the existing VC sewer piping to be replaced shall be considered incidental to the work with no additional compensation provided.

Shoring shall be utilized as necessary to prevent caving of adjacent pavement. Where required proposed shoring shall be designed and stamped by a Massachusetts Registered Professional Engineer at the expense and direction of the Contractor and submitted to the Engineer for approval. Shoring submittal shall include design computations and all proposed shoring and bracing plans and details addressing all necessary construction requirements.

The hot mix asphalt used to repair and patch the road shall be considered incidental this Item. The depth of pavement repair will be determined by the City of Somerville's Department of Public Works.

The compacted Gravel Borrow used to backfill the Test Pit shall be paid under Item 151. Gravel Borrow.

ITEM 142.
CLASS B TRENCH EXCAVATION

CUBIC YARD

The work under this item shall conform to the relevant provisions of Section 140 of the Standard Specifications.

ITEM 151.
GRAVEL BORROW

CUBIC YARD

The work to be done hereunder consists of finishing and placing gravel as required and in accordance with the plans and the relevant provisions of Section 150.

Compensation for this work shall be determined only as provided in Section 150, measurement shall be made in place and 20% added to the quantity so found.

ITEM 158.1
TRENCH DAMS FOR DRAINAGE PIPE

EACH

The work to be done under this item shall conform to the relevant provisions of section 150 of the Standard Specifications.

Check Dams shall be placed a minimum of once per drainage pipe section greater than 30 feet in length within the Disposal Site Boundary as defined by the plans.

Check Dams shall be constructed from bentonite, excavatable controlled density fill or an onsite clay material as approved by the engineer and accordance with the plans.

Measurement and Payment

Check Dams will be measured and paid at the Contract unit price per each, complete in place, which price shall include all labor, materials, equipment and incidental costs required to complete the work.

ITEM 170.

FINE GRADING AND COMPACTING – SUBGRADE AREA

SQUARE YARD

These special provisions for Item 170. supersede insofar as they conflict with the requirements of Standard Specifications as amended.

The work shall consist of shaping, trimming, rolling and finishing the surfaces of gravel foundation for pavements and gravel foundation for concrete sidewalks and driveways.

The areas to be fine-graded shall be raked to remove all stones and unsatisfactory material and shall then be rolled as directed. The work shall be paid for at the contract unit price per square yard of areas fine graded, rolled and finished and the area shall be measured horizontally between the limits of grading required.

ITEM 180.01

ENVIRONMENTAL HEALTH AND SAFETY PROGRAM

LUMP SUM

The work shall consist of ensuring the health and safety of the Contractor's employees and subcontracted personnel, the environment and public welfare from any on-site chemical contamination present in air, soil, and groundwater.

The Contractor shall prepare and implement a site-specific Environmental Health and Safety Plan (EHASP) which has been approved and stamped by a Certified Industrial Hygienist (CIH) and includes the preparer's name and work experience. The EHASP shall be submitted two weeks prior to mobilization.

The EHASP shall include appropriate components required by OSHA Standard 29 CFR 1910.120(b) ("HAZWOPER") and the Massachusetts Contingency plan (MCP) 310 CMR 40.0018 and specifically 310 CMR 40.0460, must comply with all applicable state and federal laws, regulations, standards and guidelines, and provide a degree of protection and training appropriate for implementation on the project. The EHASP shall be a dynamic document with provision for change to reflect new information, new practices or procedures, changing site environmental conditions or other situations which may affect site workers and the public. The EHASP shall be developed and implemented independently from the standard construction HASP.

Health and safety procedures provided by the Contractor shall comply with all the appropriate regulations that address employee working conditions, including but not limited to standards

established by OSHA and National Institute for Occupational Safety and Health (NIOSH). Equipment used for the purpose of health and safety shall be approved by and meet pertinent standards and specifications of the appropriate regulatory agencies. All personnel handling soils, and/or groundwater within the Disposal Site associated with RTN 3-23246 shall have current OSHA 40-hour HAZWOPER training.

The most up-to-date EHASP shall always be maintained on-site by the Contractor. It shall contain the signature of each on-site Contractor and their Subcontractor employees involved with on-site activities. The employee's signature on the EHASP shall be deemed prima facie evidence that the employee has read and understands the plan. Updated copies of signature sheets shall be submitted to the Engineer.

The EHASP shall specify a Contractor Site Safety and Health Officer responsible for implementation of the EHASP and to oversee all construction activities, including handling, storage, sampling and transport, which require contact with or exposure to potentially hazardous materials.

The level of protection required to ensure the health and safety of on-site personnel will be stipulated in the EHASP. The Site Safety and Health Officer shall implement the EHASP based on changing site and weather conditions, type of operation or activity, chemical compounds identified on-site, concentration of the chemicals, air monitoring data, physical state of the hazardous materials, potential duration of exposure to hazardous materials, dexterity required to perform work, decontamination procedures, necessary personnel and type of equipment to be utilized.

During implementation of the EHASP, a daily log shall be kept by the Site Safety and Health Officer and a copy shall be provided weekly to the Engineer. This log shall be used to record a description of the weather conditions, levels of personal protection being employed, screening data and any other information relevant to on-site environmental safety conditions. The Site Safety and Health Officer shall sign and date the daily log.

MEASUREMENT AND PAYMENT

Preparation and implementation of the EHASP, including the monitoring, protection and storage of all contaminated materials, as well as subsequent modifications to the EHASP, will be measured and paid for at the Lump Sum Bid Price.

Payment of 50% of the EHASP contract price will be made upon the initial acceptance of the EHASP by the Engineer. Payment of the remaining 50% of the EHASP contract price will be made upon completion of the work. The bid price shall include preparation and implementation of the EHASP as well as the cost for its enforcement by the Site Safety and Health Officer along with any necessary revisions and updates. The work of implementing the EHASP includes work involving, but not limited to, the monitoring, protection, and storage of all contaminated materials.

ITEM 180.02

PERSONAL PROTECTION LEVEL C UPGRADE

HOUR

The work shall consist of providing appropriate personal protective equipment (PPE) for all personnel in an area either containing or suspected of containing a hazardous environment when determined to be required by the Site Safety Officer per the Environmental Health and Safety Plan.

Contingencies for upgrading the level of protection for on-site workers will be identified in the EHASP and the Contractor shall have the capability to implement the personal protection upgrade in a timely manner. The protective equipment and its use shall be in compliance with the EHASP and all appropriate regulations and/or standards for employee working conditions. Personal Protection Level C Upgrade will be measured and paid only upon upgrade to Level C and will be at the contract unit price, per HOUR, per worker, required in Level C personal protection. No payment will be made to the Contractor to provide Level D PPE.

ITEM 181.11

DISPOSAL OF UNREGULATED SOIL

TON

ITEM 181.12

DISPOSAL OF REGULATED SOIL – IN STATE FACILITY

TON

ITEM 181.13

DISPOSAL OF REGULATED SOIL – OUT-OF-STATE FACILITY

TON

ITEM 181.14

DISPOSAL OF HAZARDOUS WASTE

TON

The work under these Items shall include the transportation and off-site disposal of all excavated soils. These items shall include the storage of excavated soils in up to three roll-off containers stored on the adjacent 50 Tufts Street property as may be required to determine soil management location. It shall also include the cost of any additional laboratory analyses required by a disposal facility, identifying and obtaining acceptance at an appropriate disposal facility.

Excavation of existing subsurface materials includes contaminated soils within the Disposal Site associated with RTN 3-23246. The primary contaminants are chlorinated volatile organic compounds (CVOCs). This work will be performed as a Utility Release Abatement Measure (URAM) in compliance with the MCP. The City will provide the required LSP support services. The Contractor shall be responsible for the proper coordination of characterization, transport and disposal, recycling or reuse of contaminated soils. Disposal, recycling or reuse will be referred to as “disposal” for the remainder of this specification unless otherwise stated. However, regardless of the use of the term herein, there will be no compensation under these items for reuse within the project limits.

The Tufts Street right-of-way soils from below pavement to at least 10 feet below grade have been initially characterized as described in the Environmental Site Conditions Summary, Tufts Street Improvement Project (Atlas, May 2024). The Contractor is responsible for arranging for and coordinating the activities necessary for on-site reuse or transport and disposal of contaminated soils. Such coordination will include the Engineer and his/her designee overseeing management of contaminated materials, and the City's LSP.

Contaminated soils must be disposed of in a manner appropriate for the soil classification as described below and in accordance with the applicable laws of local, state and federal authorities. The Contractor shall be responsible for identifying a disposal facility(s) licensed to accept the class of contaminated soils to be managed and assure that the facility can accept the anticipated volume of soil contemplated by the project.

The Contractor shall be responsible for all ancillary professional services including soil sampling and analysis for this work. All sampling and analysis shall be performed in accordance with the MCP and the MassDEP's current Compendium of Analytical methods. A report shall be delivered to the Engineer outlining the material sampling methods, laboratory analysis results and proposed course of action. The Contractor will be responsible for obtaining all facility approvals and preparing all Uniform Hazardous Waste Manifests, Material Shipping Record, waste profiles etc. subject to the approval of the Engineer and City's LSP.

The Engineer and City's LSP will provide an MCP Bill of Lading. Contractor will be responsible for coordinating management facility's signature through MassDEP's eDEP submittal system. All excavated soils from within the Disposal Site for RTN 3-23246 that are not staged on an impervious surface adjacent to the excavation and placed back in the excavation the day excavated or removed from the work area for offsite management the same day shall be stored in lined roll-off containers or in stockpiles placed on and covered with polyethylene sheeting. Any stockpiles shall be covered with polyethylene sheeting at the end of each workday. Groundwater within saturated soils shall be allowed to drain back into the excavation before being moved from the work area.

CLASSES OF CONTAMINATED SOILS:

The Contractor shall provide the City's LSP with a determination that soil excavated or to be excavated is unregulated soil or contaminated soil as defined in this section. Such materials shall be given a designation for purposes of reuse or disposal based on the criteria of the Massachusetts Contingency Plan (MCP). Based on consultation with the Engineer and City's LSP, soils which are not suitable for reuse will be given a designation for purposes of off-site disposal based on the characterization data and disposal facility license/permit requirements. The Classes of Contaminated Soils are as follows:

Unregulated Soil consists of soil or fill and dredged material with measured levels of oil and hazardous material (OHM) contamination at concentrations below the applicable Reportable Concentrations (RCs) presented in the MCP and from outside the Disposal Site associated with RTN 3-23246. Unregulated soil consists of material which may be reused (or otherwise disposed) as fill within the Commonwealth of Massachusetts subject to the non-degradation

criteria of the MCP (310 CMR 40.0032(3)), in a restricted manner, such that they are sent to a location with equal or higher concentrations of similar contaminants.

Suitable facilities include licensed disposal facilities, approved industrial settings in areas which will be capped or covered with pavement or compost topsoil and seeded, and for purposes of this project should be reused as fill within the project site construction corridor whenever possible. The material cannot be placed in residential and/or environmentally sensitive (e.g., wetlands) areas. Under no circumstances shall contaminated soils be placed in an uncontaminated or less contaminated area (including the area above the groundwater table if this area shows no sign of contamination).

The Contractor shall submit to the Engineer the proposed disposal location for unregulated soils for approval. If such a disposal location is not a licensed disposal facility, the Contractor shall submit to the Engineer analytical data to characterize the disposal area sufficiently to verify that the unregulated material meets the non-degradation requirements of the MCP. In addition, the Contractor shall provide written confirmation from the operator of the proposed disposal location that they have been provided with the analytical data for both the materials to be disposed as well as the Disposal Site characterization and that s/he agrees to accept this material.

A Material Shipping Record or Bill of Lading, as appropriate, shall be used to track the off-site disposal of unregulated soil and a copy, signed by the disposal facility or property owner, shall be provided to the Engineer in order to document legal disposal of the unregulated material.

The cost of on-site disposal of unregulated soil within the project area will be considered incidental to the item of work to which it pertains.

Regulated Soil consists of materials containing measurable levels of OHM that are equal to or exceed the applicable Reportable Concentrations for the site as defined by the MCP, 310 CMR 40.0000 and/or from within the Disposal Site boundary associated with RTN 3-23246.

Regulated soil may be reused on site within the Disposal Site boundary for RTN 3-23246 provided that it meets the appropriate geotechnical criteria established by the Engineer.

Regulated Soil may be reused (as daily or intermediate cover or pre-cap contouring material) or disposed (as buried waste) at lined landfills within the Commonwealth of Massachusetts or at an unlined landfill that is approved by the MassDEP for accepting such material, in accordance with MassDEP Policy #COMM-97-001, or at a similar out-of-state facility. It should be noted that soils which exceed the levels and criteria for disposal at in-state landfills, as outlined in COMM-97-001, may be shipped to an in-state landfill, but require approval from the MassDEP Division of Solid Waste Management and receiving facility. Regulated Soils may also be recycled at a MassDEP approved recycling facility possessing a Class A recycling permit subject to acceptance by the facility and compliance with MassDEP Policy #BWSC-94-400.

Regulated Soil removed from the site for disposal or treatment must be removed via a City LSP approved Bill of Lading, Manifest or applicable material tracking form. This type of facility shall be approved/permitted by the State in which it operates to accept the class of contaminated soil in accordance with all applicable local, state and federal regulations.

Hazardous Waste consists of materials which must be disposed of at a facility permitted and operated in full compliance with Federal Regulation 40 CFR 260-265, Massachusetts Regulation 310 CMR 30.000, Toxic Substances Control Act (TSCA) regulations, or the equivalent regulations of other states, and all other applicable local, state, and federal regulations. All excavated materials classified as hazardous waste shall be disposed of at an out-of-state permitted facility. This facility shall be a RCRA hazardous waste or TSCA facility, or RCRA hazardous waste incinerator. This type of facility shall be approved/permitted by the State in which it operates to accept hazardous waste in accordance with all applicable local, state and federal regulations and shall be permitted to accept all contamination which may be present in the soil excavate. The Contractor shall ensure that, when needed, the facility can accept TSCA waste materials i.e., polychlorinated biphenyls (PCBs).

Hazardous Waste be removed from the site for disposal or treatment via a City LSP approved Uniform Hazardous Waste Manifest.

MONITORING/SAMPLING/TESTING REQUIREMENTS:

Unless already provided in the Environmental Site Conditions Summary, Tufts Street Improvement Project (Atlas, May 2024), the Contractor shall be responsible for monitoring, sampling and testing during and following excavation of contaminated soils to determine the specific class of contaminated material. Additional sampling and analysis may be necessary to meet the requirements of the disposal facility license/permit. The cost of such additional sampling and analysis shall be included in the bid cost for the applicable disposal items. The Contractor shall obtain sufficient information to demonstrate that the contaminated soil meets the disposal criteria set by the receiving facility that will accept the material.

No excavated material will be permanently placed on-site, except to return to the general location it was removed from, or removed for off-site disposal until the results of chemical analyses have been received and the materials have been properly classified. The Contractor shall submit to the Engineer results of field and laboratory chemical analyses tests within seven (7) days after their completion, accompanied by the classification of the material determined by the Contractor, and the intended disposition of the material.

WASTE TRACKING:

Copies of the fully executed Weight Slips/Bills of Lading/Manifests/Material Shipping Records or other material tracking forms received by the Contractor from each disposal facility and for each load disposed of at that facility, shall be submitted to Engineer and the City's LSP within three (3) days of receipt by the Contractor. The Contractor is responsible for preparing and submitting such documents for review and signature by the Engineer and/or City LSP or other appropriate person with signatory authority, three (3) days in advance of transporting soil off-site. The Contractor shall furnish a form attached to each manifest or other material tracking form for all material removed off-site, certifying that the material was delivered to the site approved for the class of material. If the proposed disposition of the material is for reuse within the project

construction corridor, the Contractor shall cooperate with the Engineer to obtain a suitable representative sample(s) of the material to establish its structural characteristics in order to meet the applicable structural requirements as fill for the project.

All material transported off-site shall be loaded by the Contractor into properly licensed and permitted vehicles and transported directly to the selected disposal or recycling facility and be accompanied by the applicable shipping paper. At a minimum, truck bodies must be structurally sound with sealed tail gates, and loads covered with a liner, which shall be placed to form a continuous waterproof tarpaulin to protect the load from wind and rain.

DECONTAMINATION OF EQUIPMENT:

Tools and equipment which are to be taken from and reused off site shall be decontaminated in accordance with applicable local, state and federal regulations. This requirement shall include, but not be limited to, all tools, heavy machinery and excavating and hauling equipment used during excavation, stockpiling and handling of contaminated material. Decontamination of equipment is considered incidental to the applicable excavation item.

REGULATORY REQUIREMENTS:

The Contractor shall be responsible for adhering to regulations, specifications and recognized standard practices related to contaminated material handling during excavation and disposal activities. Work within the Disposal Site boundary for RTN 3--23246 will be performed as a URAM under the supervision of the City's LSP. The City shall not be responsible at any time for the Contractor's violation of pertinent State or Federal regulations or endangerment of laborers and others. The Contractor shall comply with all rules, regulations, laws, permits and ordinances of all authorities having jurisdiction including, but not limited to, MassDEP, the U.S. Environmental Protection Agency, Federal Department of Transportation (DOT), the Commonwealth of Massachusetts and other applicable local, state and federal agencies governing the disposal of contaminated soils.

All labor, materials, equipment and services necessary to make the work comply with such regulations shall be provided by the Contractor without additional cost to The City. Whenever there is a conflict or overlap within the regulations, the most stringent provisions are applicable. The Contractor shall reimburse the City for all costs it incurs, including penalties and/or for fines, as a result of the Contractor's failure to adhere to the regulations, specifications, recognized standard practices, etc., that relate to contaminated material handling, transportation and disposal.

SUBMITTALS:

I. Summary of Sampling Results, Classification of Material and Proposed Disposal Option.

At least 1 week prior to collecting soil samples to support soil management, Contractor shall provide a soil sampling plan describing how samples will be collected, laboratory analytical methods, and data quality objective for review and approval.

Other than already provided in the Environmental Site Conditions Summary, Tufts Street Improvement Project (Atlas, May 2024) soil characterization reports must be submitted to the Engineer for review and approval within 14 days after soil analysis and prior to any disposal off-site. This requirement is on-going throughout the project duration.

Characterization reports will be submitted for all soil, and debris through the sampling and analysis program. Each report will include a site plan which identifies the sampling locations represented in the Report. The Construction Plan sheets may be used as a base plan to record this information. It will outline the material sampling methods. Sampling Results will be presented in tabular format. Each sample will be identified by appropriate identification matching the sample identification shown on the Chain of Custody Record. The sample must also be identified by location (e.g., grid number or stockpile number). For each sample, the following information must be listed: unique laboratory sample identification, the classification (unregulated, regulated, etc.), proposed disposal option for the stockpile or unit of material represented, and all analytical results.

Each characterization report will include the laboratory analytical report and Chain of Custody Record for the samples included in the Report.

II. Stockpiling, Transport, and Disposal.

At least two weeks prior to the start of any excavation activity, the Contractor shall submit the following for review and shall not begin excavation activity until the entire submittal is acceptable to the Engineer and City LSP.

Excavation and Stockpiling Protocol:

Provide a written description of the management protocols for performing excavation and stockpiling and/or direct loading for transport, referencing the locations and methods of excavating and stockpiling excavated material in accordance with Items 180.1 through 180.5.

Disposal and Recycling Facilities:

1. Provide the name, address, applicable licenses and approved waste profile for disposal and recycling location(s) where contaminated soil will be disposed. Present information substantiating the suitability of proposed sites to receive classifications of materials intended to be disposed there, including the ability of the facility to accept anticipated volumes of material.

2. Material should not be sent to facilities which are actively considered by the MassDEP, United States Environmental Protection Agency (EPA) or other responsible agency to be in violation of federal, state or local hazardous waste or hazardous material regulations. The Engineer reserves the right to reject any facility on the basis of poor compliance history.

The City will sign waste profiles, Uniform Hazardous Waste Manifests and other similar documents within 1 week of being provided, contingent upon the City's LSP review supporting their signature.

With at least 1 week's notice, and being provided required information regarding transporter and management facility, the Engineer and City's LSP will provide an MCP Bill of Lading. Contractor will be responsible for coordinating management facility's signature through MassDEP's eDEP submittal system.

MEASUREMENT AND PAYMENT

Disposal of contaminated soil shall be measured for payment by the ton of actual and verified weight of contaminated materials removed and disposed of and associated Uniform Hazardous Waste Manifest, MCP Bill of Lading, or Material Shipping Record signed by the receiving facility. The quantities will be determined only by weight slips issued by and signed by the approved disposal facility. The most cost-effective, legal disposal method shall be used.

ITEM 181.11: Disposal of Unregulated Soil shall be under the Contract Unit Price by the weight, in tons, of contaminated materials removed from the site and transported to and disposed of at an approved location or licensed facility, and includes any and all costs for approvals, permits, fees and taxes, additional testing/characterization required by the facility beyond the standard disposal test set, decontamination procedures, transportation and disposal.

ITEM 181.12: Disposal of Regulated Soil – In-State Facility shall be under the Contract Unit Price by the weight, in tons, of contaminated materials removed from the site and transported to and disposed of at an approved in-state facility, and includes any and all costs for approvals, permits, fees and taxes, testing/characterization required by the facility beyond the standard disposal test set, decontamination procedures, transportation and disposal.

ITEM 181.13: Disposal of Regulated Soil - Out-of-State Facility shall be under the Contract Unit Price by the weight, in tons, of contaminated materials removed from the site and transported to and disposed of at an approved out-of-state facility, and includes any and all costs for approvals, permits, fees and taxes, testing/characterization required by the facility beyond the standard disposal test set, decontamination procedures, transportation and disposal.

ITEM 181.14: Disposal of Hazardous Waste shall be under the Contract Unit Price by the weight, in tons, of hazardous waste removed from the site and transported to and disposed of at

the licensed hazardous waste facility, and includes any and all costs for approvals, permits, fees and taxes, testing/characterization required by the facility beyond the standard disposal test set, decontamination procedures, transportation and disposal.

ITEM 183.1

MANAGEMENT OF GROUNDWATER

LUMP SUM

This Item addresses the treatment, management, on-site re-infiltration, and disposal of groundwater generated during construction. .

The Contractor is advised that CVOC contaminated groundwater may be encountered within the portion of the work area within the Disposal Site for RTN 3-23246 during dewatering activities. The levels and nature of contamination may vary depending on location and/or depth. It will be the responsibility of the Contractor to ensure that water removed during dewatering operations is recharged to within approximately 25-feet of the location from which it is removed and in a manner that does not change groundwater flow direction or gradient outside the work area in accordance with all applicable laws and regulations and in accordance with this specification. Groundwater re-infiltration shall be completed in such a manner that does not cause migration, erosion, or sediment mounding.

The Engineer or City LSP may require re-charging to be suspended if in their opinion the above requirements are not being met.

The unpermitted discharge of dewatering effluent into the environment (storm drain, surface water body, onto the ground) is a violation of federal and state laws and regulations. If Contractor chooses to the surface or stormwater management system, approvals must be sought from the appropriate federal, state, or local regulatory jurisdiction. The EPA will not specify a treatment system or method, but normally requires that the treated discharge to a storm drain that leads to a surface water body meet Massachusetts Drinking Water Standards.

Construction Dewatering discharges to municipal storm drain system, MassDEP and EPA regulations require a National Pollutant Discharge Elimination System (NPDES) Dewatering and Remediation General Permit (DRGP) effective August 2, 2022). The application requires that operators of proposed new discharges seeking coverage under this general permit submit a Notice of Intent (NOI) to EPA. The Contractor is solely responsible for applying for and obtaining coverage under the NPDES DRGP from EPA and, MassDEP, including the costs associated with sampling and analysis of groundwater and any application fees. The Contractor is required to submit a completed copy of the NOI and DRGP to the Engineer and LSP for approval, prior to commencement of discharge.

Upon permanent cessation of the discharges authorized by the DRGP, the Contractor shall be responsible for submitting a Notice of Termination (NOT) to EPA New England within 30 days of

the permanent cessation. The Contractor is required to submit to Engineer a completed copy of the NOT within 14 days of the permanent cessation of the discharges authorized by the DRGP. All costs and fees associated with the submission of the NOT will be the responsibility of the Contractor.

The Contractor shall be responsible for adhering to regulations, specifications, and recognized standard practices related to contaminated groundwater handling during dewatering activities. Somerville shall not be responsible at any time for the Contractor's violation of pertinent local, state or federal regulations or endangerment of laborers and others. The Contractor shall comply with all rules regulations, laws, permits and ordinances of all authorities having jurisdiction including, but not limited to, MassDEP, the, Massachusetts Water Resources Authority (MWRA), the Commonwealth of Massachusetts and other applicable local, state and federal agencies governing this work.

The Contractor shall be responsible for determining compliance with the requirements of any permit and for any sampling, testing, and disposal required in connection with said permits. The City reserves the right to collect additional samples of dewatered groundwater to determine the contractor's compliance with the Permit's requirements. All laboratory testing is to be performed by a MassDEP certified laboratory for all parameters being tested. Copies of all field and laboratory testing results, reports, etc. required by the permits must be supplied to the Engineer. MassDEP and the permit-granting agency, where applicable, reserve the right to collect additional samples of discharged groundwater to verify compliance with permit requirements.

The bidder shall factor into the payment item all costs associated with infiltration. Bid price shall also include full compensation for labor, materials, maintenance, mobilization, rental and other related costs. Item 183.2 will be used for disposal of used granular-activated carbon canisters.

SUBMITTALS:

At least two (2) weeks prior to initiating work, the Contractor shall submit an excavation dewatering plan for review and approval that includes a detailed description of the approach to dewatering, a description of methodology for limiting the need to dewatering and re-infiltration. If treatment is anticipated, discharge points, sampling frequency, required permits, transporters and waste facilities complete with license numbers, permit numbers, contact person, and address and telephone number that the Contractor plans to utilize for waste disposal. The plan shall be submitted for the record.

If performed, the contractor shall provide all groundwater sampling and analyses, results and reports required by all applicable local, state and federal agencies, if any. The Contractor shall submit to the Engineer for review all plans and documents that must be submitted to the EPA and MassDEP, potential treatment system analytical reports and correspondence. Copies of all permits and approvals and lab analyses and test results associated with groundwater treatment

and/or disposal must be submitted to the Engineer within 3 days of receipt by the Contractor, if any.

MEASUREMENT AND PAYMENT

Payment shall be made at the Lump Sum basis and will cover all work associated with dewatering and re-infiltration, and if performed all groundwater treatment and testing required by discharge permits and regulatory requirements, which price shall be full compensation for all necessary labor and materials, mobilization, maintenance, demobilization of the appropriate unit(s), freight, rental costs, field and laboratory testing costs and permits.

ITEM 201.5

CATCH BASIN – MUNICIPAL STANDARD

EACH

The work to be done under this Item shall consist of the furnishing and installation, including excavation and backfill of trenches for catch basins, at the locations established by the Engineer, all in accordance with Section 201 of the Standard Specifications and the following:

Catch Basins shall conform to City of Somerville Construction Standards.

Catch basin may have a cover instead of a grate if receiving flow from a drop inlet, as directed by Engineer.

ITEM 202.01

MANHOLE – MUNICIPAL STANDARD

EACH

The work to be done under this Item shall consist of the furnishing and installation, including excavation and backfill of trenches for manholes, at the locations established by the Engineer, all in accordance with Section 201 of the Standard Specifications and the following:

Manholes shall conform to City of Somerville Construction Standards. Frames and covers shall be City of Somerville style, all conforming to City of Somerville Construction Standards.

ITEM 206.01

DROP INLET – MUNICIPAL STANDARD

EACH

The work to be done under this Item shall consist of the furnishing and installation, including excavation and backfill of trenches for drop inlets, at the locations established by the Engineer, all in accordance with Section 201 of the Standard Specifications and the following:

Drop inlets shall conform to City of Somerville Construction Standards.

Drop inlets may only discharge to a catch basin. The receiving catch basin often has a cover instead of a grate.



10 State Street, Suite 100
Woburn, MA 01801
781.932.9400 | oneatlas.com

May 9, 2025

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup
15 Presidential Way
Woburn, Massachusetts

via: eDEP

**SUBJECT: Contained-In Determination
Soil from Tufts Street Right-of-Way Improvements
Somerville, MA
RTN 3-51811
Atlas Project No.: 6000007464**

Dear Program Manager:

Atlas Technical Consultants LLC (Atlas) has been retained by the City of Somerville to provide Massachusetts Contingency Plan (310 CMR 40.0000)(MCP) and related Licensed Site Professional (LSP) services to support the Tufts Street Improvement Project. On behalf of the City of Somerville, I have made a "contained-in" determination (CID) following the approach presented in the Massachusetts Department of Environmental Protection's (MassDEP) Technical Update, Considerations for Managing Contaminated Soil: RCRA Land Disposal Restrictions and Contained-In Determination (2010) regarding soil from a portion of the following M.G.L. c. 21E disposal site:

Release Tracking Number:	3-51811
Site Name:	Tufts Street Right-of-Way Improvements
Street Address:	Tufts Street right-of-way from Cross Street to Washington Street
City/Town:	Somerville, MA
Zip Code:	02145

The soil contained the listed hazardous waste(s) with Waste Codes U043, U210 and U228, which MassDEP is authorized to regulate under the Resource Conservation and Recovery Act (RCRA) by the U.S. Environmental Protection Agency (USEPA). However, the soil (check one):

- ☒ Met all applicable S-1 standards upon removal*; or
☐ Was treated through a method of treatment other than dilution so as to meet all applicable S-1 standards.

*The soil noted herein has been pre-characterized in-situ and has been determined to meet applicable S-1 standards.



The levels of the listed hazardous waste constituents in the soils to be generated are:

Summary of Detected Listed Waste within Contained-In Determination						
Sample Name / Depth	Sample Date	Substance/CAS # / Waste Code	Results (ppm)	MCP Method 1S-1 Standards		
				S-1 Soil & GW-1	S-1 Soil & GW-2	S-1 Soil & GW-3
ATC-8, 5-10'	3/14/24	Tetrachloroethylene (PCE) / 127-18-4 / U210	0.134	1 ppm	4 ppm	100 ppm
50Tuft-B101, 0-1'	2/12/24		0.0023			
50Tuft-B101,3 - 5'	2/12/24		0.015			
50Tuft-B102, 0-1'	2/12/24		0.00048			
50Tuft-B102, 1-3'	2/12/24		0.001			
50Tuft-B104, 0-1'	2/12/24		0.023			
50Tuft-B104, 1-3'	2/12/24		0.015			
50Tuft-B105, 0-1'	2/12/24		0.81			
50Tuft-B105, 1-3'	2/12/24		0.01			
50Tuft-B102, 1-3'	2/12/24	Trichloroethene (TCE) / 79-01-06 / U228	0.00037	0.3	0.3	30
50Tuft-B105, 0-1'	2/12/24	Vinyl Chloride / 75-01-04 / U043	0.053	0.3	0.3	0.3

The City of Somerville Tufts Street Improvement Project is to implement traffic calming and accessibility improvements that will reconstruct sidewalks, install new raised stormwater inlets drains to improve the existing stormwater management system, and repave Tufts Street between Cross Street and Washington Street as part of the City's Pavement and Sidewalk Management Program. Most excavations will be limited to 3 feet below grade with some excavations for drainage structure connections / rehabilitations extending to 5 feet below grade. Groundwater has been observed to range from approximately 7 to 13 feet below grade in the majority of the area where excavation will occur. To the extent practicable, soil will be reused in the area from which it was excavated. The limit of work is shown on attached **Figures 1 and 2**.

Most work is located within a Disposal Site listed by the MassDEP under Release Tracking Number (RTN) 3-23246. **Figure 1** shows the northern extent of the Disposal Site as it relates to limits of work and all the proposed work shown on **Figure 2** is within the Disposal Site. This Disposal Site is associated with a release of tetrachloroethylene, also known as perchloroethylene (PCE), to soil and groundwater from a former drycleaner facility located at the abutting 50 Tufts Street property. Based upon a review of reports submitted to MassDEP for RTN 3-23246 Atlas concludes that the vertical extent of this Disposal Site begins just below the pavement surface and extends to at least 10 feet below grade.

On March 14 and 15, 2024, Atlas supervised the installation of 8 soil borings identified as ATC-1 to ATC-8 for sampling and laboratory analyses of soil to conduct in-situ pre-characterization of soil within the Tufts Street right-of-way. Locations were selected to reflect areas where soil excavation was proposed to support planned work. Soil borings ATC-4 to ATC-8 are located within the Disposal Site. Soil boring ATC-3 is located at the approximate northeast edge of the Disposal Site and borings ATC-1 and ATC-2 are located outside the Disposal Site. Two soil samples from each boring, for a total of sixteen (16) soil samples, were collected. At each boring location, a discrete soil sample was collected by hand auger during preclearing from 0 to 5 feet below grade and using a dedicated acetate liners using a Geoprobe drill rig from 5 to 10 feet below grade surface. Soil boring locations are shown on **Figures 1 and 2**.



Soil samples from each boring were screened for total volatile organic compounds (VOCs), i.e., headspace, with a pre-calibrated photoionization detector (PID) in accordance with the MassDEP jar headspace method.

The soil samples were placed in laboratory provided containers and submitted to Eurofins laboratory under a chain of custody and analyzed for low level volatile organic compounds (VOCs) by EPA Method 8260.

Two sets of composite soil samples were collected from the 8 soil borings. One set (ATC-1 to ATC-8 Composite 0-5') was from the 0 to 5 feet below grade interval and the other set (ATC-1 to ATC-8 Composite 5-10') was from 5 to 10 foot below surface interval. These samples were placed in properly preserved laboratory provided containers and submitted to Eurofins laboratory under a chain-of-custody for the following analyses typically required by soil management facilities:

- Semi-VOCs with low level PAHs (SIMS) by EPA Method 8270;
- PCBs by EPA Method 8082;
- RCRA 8 Metals; TCLP lead;
- Total Petroleum Hydrocarbons by 8100; and
- Corrosivity; Total Organic Carbon; Flashpoint; Reactivity Cyanide and Sulfide; and Conductivity.

The soil analytical results were non-detect for all VOCs at 15 of 16 samples. Only PCE at 0.0314 milligrams per kilogram (mg/kg) was detected in soil boring ATC-8 at 5-10 feet below grade surface. The soil analyses do not exhibit any hazardous waste characteristics pursuant to 310 CMR 30.120. All detected compounds reported were below their MCP Method 1 Standards as were the detection limits for those compounds not detected. A summary of VOC soil data is presented in attached **Table 1**. The associated laboratory report is attached.

Atlas reviewed previous submittals and associated soil data made to the MassDEP for the following RTNs associated with 50 Tufts Street or in the immediate area for data relevant to this CID:

- RTNs 3-23246 / 3-24358 / 3-26114 / 3-35528 for 50 Tufts Street;
- RTNs 3-28231 / 3-30620 associated with MBTA/Green Line Extension work in the area;
- RTN 3-37468 for 31 Tufts Street associated with impacts from 50 Tufts Street; and
- RTN 3-14792 for 60 Tufts Street associated with asbestos only.

Relevant data from soil samples collected near the Tufts Street right-of-way are included on **Table 1** and the summary table above. Due to the age of the original VOC release associated with 50 Tufts Street, completed and ongoing remediation and/or Exposure Pathway Mitigation Measures (EPMM) at 23, 27, 31, 50, and 60 Tufts Street as well as 121 Washington Street, soil data more than 10 years old is not considered representative of current site conditions and was not included in the data summary tables. EPMMs include Active Exposure Pathway Mitigation Measures (AEPMM) and passive subslab venting systems. Furthermore, data was excluded if it was from more than 10 feet below grade or there was more recent data available between it and the right-of-way.

Based upon the above, the only relevant soil data for this CID was found in the Phase V Status Report No. 26 and Remedial Monitoring Report No. 41, 50 Tufts Street (GEI Consultants, Inc., August 2024). This submittal documents how on February 12, 2024, GEI collected shallow soil samples to the northwest and southeast of the 50 Tufts Street building, adjacent to street improvement work zone from 5 soil borings (B101 to B105) advanced up to 5 feet below grade. These soil boring locations are shown on **Figures 1 and 2**. Based upon the detected PCE and vinyl chloride concentrations all being below all their Method 1 Soil Standards as supported by the information presented herein, these soils are eligible for a CID.

Soil data from samples collected from B103 0-1' and B103 1-3' exhibit concentrations of PCE above its Method 1 Standards. Therefore, additional assessments will be performed in the area shown on **Figures 1 and 2** before these soils are managed under this CID. It is estimated that approximately 50 tons (35 CY) of soil will be excavated from the area around B103. In the immediate area of B103, excavation will be limited to what is required to reconstruct the existing sidewalk. The soil may be further characterized as work progresses to see if it meets this CID requirements. This will involve collecting soil samples from excavations in this area and submitting for laboratory CVOC analysis. A soil sample will be collected from the excavation area as work progresses at a rate



of no more than every 15 CY. If the reported CVOC concentrations in a sample are all less than their MCP Method 1 S-1/GW-1/GW-2/GW-3 Standards, the CID will be applicable to the soil represented by this sample.

A summary of VOC soil data identified by Atlas as relevant to this CID is presented in attached **Table 1** and included in the table above. The associated data summary table, figure and laboratory report from GEI's 2024 report previously submitted to MassDEP is also attached.

The soil management activities associated with this CID Petition will be conducted as a Utility-related Release Abatement Measure (URAM) under **RTN 3-51811**. The contract documents for the work estimate that up to 520 tons (approximately 375 cubic yards) of soil will require offsite management from the area represented by the soil data presented herein and covered by this CID, with the potential for an additional 50 tons (35 cubic yards) from around B103 if supported by data collected as work progresses. As noted above, most excess soil will come from less than 3 feet below grade with limited areas where stormwater catch basins are being replaced extending to 5 feet below grade. None of these deeper areas are located adjacent to the area excluded from this CID.

I understand that this "contained-in" determination is subject to a 21-day period during which the determination is subject to review by the MassDEP and that the soil cannot be managed as non-hazardous waste until the 21-day review period passes without objection from MassDEP or USEPA. A copy of the validated and unsigned BWSC-126 Miscellaneous Document Transmittal Form submitted concurrently with this CID is **Attached**.

I also understand that if the soil is to be transported out-of-state, it must first be determined if the operator of the landfill or other receiving facility and the relevant state agency (or the relevant USEPA region, if the state does not administer the RCRA program) are willing to accept contained-in determinations performed by a Massachusetts Licensed Site Professional. In doing so, the process by which "contained-in" determinations are performed in Massachusetts will be explained to the relevant parties and proper documentation of all conversations will be retained.

I, Michael Gitten, attest under the pains and penalties of perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this submittal, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the person or entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate or incomplete information.

Respectfully submitted,
ATLAS

By:  5/12/25

Signature Date

LSP #: 7505
LSP Name: Michael Gitten, LSP
Telephone: 781-404-1439

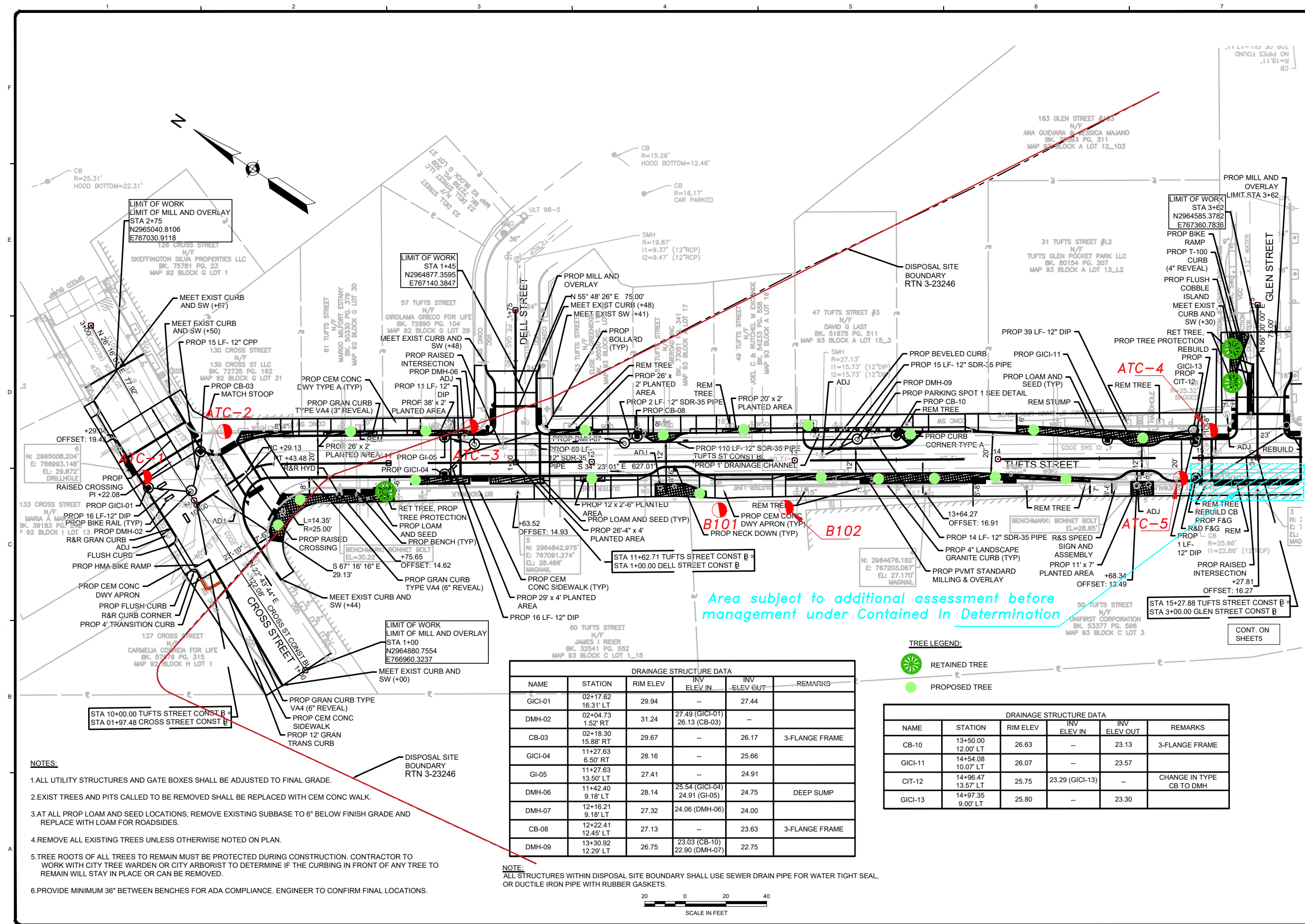
For: City of Somerville
Name of person or entity

Attachments: Figure 1 - Northwestern Project Extent
Figure 2 - Southeastern Project Extent
Table 1 - Soil analytical Data Summary
Laboratory Analytical Data Report – Atlas
Supporting Information from RTN 3-23246
Draft BWSC-126

Cc: Rebecca Wright, Somerville rwright@somervillema.gov File: cid petition-somerville-tufts st improvements-5.9.25

\\CORP.ATC.INT\ATC_FILES\SERVER\WOB_FILES\SERVER\PROJECTS - SOMERVILLE\TUFTS STREET\FIGURES & PLANS\CAD\DRAWING1.DWG, FIG 2 - PAGE 4

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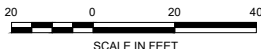


NOTES:

1. ALL UTILITY STRUCTURES AND GATE BOXES SHALL BE ADJUSTED TO FINAL GRADE.
2. EXIST TREES AND PITS CALLED TO BE REMOVED SHALL BE REPLACED WITH CEM CONC WALK.
3. AT ALL PROP LOAM AND SEED LOCATIONS, REMOVE EXISTING SUBBASE TO 6" BELOW FINISH GRADE AND REPLACE WITH LOAM FOR ROADSIDES.
4. REMOVE ALL EXISTING TREES UNLESS OTHERWISE NOTED ON PLAN.
5. TREE ROOTS OF ALL TREES TO REMAIN MUST BE PROTECTED DURING CONSTRUCTION. CONTRACTOR TO WORK WITH CITY TREE WARDEN OR CITY ARBORIST TO DETERMINE IF THE CURBING IN FRONT OF ANY TREE TO REMAIN WILL STAY IN PLACE OR CAN BE REMOVED.
6. PROVIDE MINIMUM 36" BETWEEN BENCHES FOR ADA COMPLIANCE. ENGINEER TO CONFIRM FINAL LOCATIONS.

DRAINAGE STRUCTURE DATA					
NAME	STATION	RIM ELEV	INV ELEV IN	INV ELEV OUT	REMARKS
GICI-01	02+17.62 16.31' LT	29.94	--	27.44	
DMH-02	02+04.73 1.52' RT	31.24	27.49 (GICI-01) 26.13 (CB-03)	--	
CB-03	02+18.30 15.88' RT	29.67	--	26.17	3-FLANGE FRAME
GICI-04	11+27.63 6.50' RT	28.16	--	25.66	
GI-05	11+27.63 13.50' LT	27.41	--	24.91	
DMH-06	11+42.40 9.18' LT	28.14	25.54 (GICI-04) 24.91 (GI-05)	24.75	DEEP SUMP
DMH-07	12+16.21 9.18' LT	27.32	24.06 (DMH-06)	24.00	
CB-08	12+22.41 12.45' LT	27.13	--	23.63	3-FLANGE FRAME
DMH-09	13+30.92 12.29' LT	26.75	23.03 (CB-10) 22.90 (DMH-07)	22.75	

NOTE:
ALL STRUCTURES WITHIN DISPOSAL SITE BOUNDARY SHALL USE SEWER DRAIN PIPE FOR WATER TIGHT SEAL, OR DUCTILE IRON PIPE WITH RUBBER GASKETS.



TREE LEGEND:

- RETAINED TREE
- PROPOSED TREE

DRAINAGE STRUCTURE DATA					
NAME	STATION	RIM ELEV	INV ELEV IN	INV ELEV OUT	REMARKS
CB-10	13+50.00 12.00' LT	26.63	--	23.13	3-FLANGE FRAME
GICI-11	14+54.08 10.07' LT	26.07	--	23.57	
CIT-12	14+98.47 13.57' LT	25.75	23.29 (GICI-13)	--	CHANGE IN TYPE CB TO DMH
GICI-13	14+97.35 9.00' LT	25.80	--	23.30	



www.tetratech.com
100 Nickerson Road
Marlborough, Massachusetts 01752
Phone: (508) 786-2200 Fax: (508) 786-2201



Contained In Determination Petition
Northwestern Project Extent
City of Somerville
Tufts Street Right of Way Improvements
Somerville, MA

Project Number:
6000007464

Date:
05/08/2025

Drn. By:
AGL

Ckd. By:
MSG

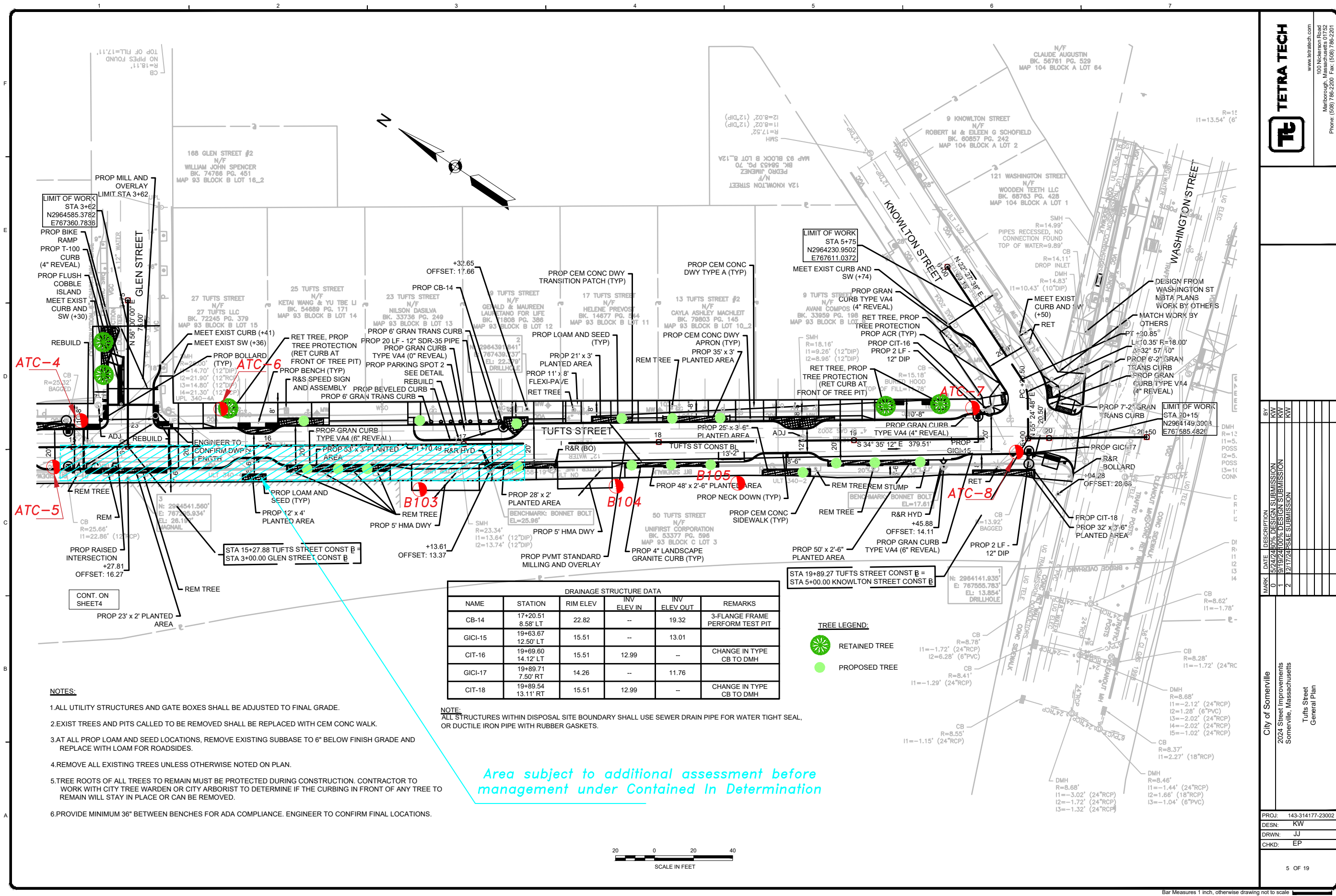
Scale:
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Figure:

1

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100 Nickerson Road
Norborough, Massachusetts 01552
Phone: (508) 750-2200 Fax: (508) 750-2201

MARK	DATE	DESCRIPTION
0	5/24/2024	100% DESIGN SUBMISSION
1	9/19/2024	100% DESIGN SUBMISSION
2	2/17/2025	PS&E SUBMISSION

City of Somerville
2024 Street Improvements
Somerville, Massachusetts
Tufts Street
General Plan

PROJ: 143-314177-23002
DES: KW
DRWN: JJ
CHKD: EP

5 OF 19

Contained In Determination Petition Southeastern Project Extent

City of Somerville
Tufts Street Right of Way Improvements
Somerville, MA

Project Number:
6000007464

Date:
05/08/2025

Dwn. By:
AGL

Ckd. By:
MSG

Scale:
AS SHOWN

Figure:

2



Table 1 - Soil Analytical Data Summary
Tufts Street - Somerville, MA

	MCP Method 1 Standards			ATC-1	ATC-1	ATC-2	ATC-2	ATC-3	ATC-3	ATC-4	ATC-4	ATC-5	ATC-5	ATC-6	ATC-6	ATC-7
Laboritory ID				620-17450-5	620-17450-6	620-17450-3	620-17450-4	620-17450-1	620-17450-2	620-17450-15	620-17450-16	620-17450-17	620-17450-18	620-17450-13	620-17450-14	620-17450-11
Sample Depth (feet)	S-1/GW-1	S-1/GW-2	S-1/GW-3	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5
Sample Collection Date				3/15/24	3/15/24	3/15/24	3/15/24	3/15/24	3/15/24	3/14/24	3/14/24	3/14/24	3/14/24	3/14/24	3/14/24	3/14/24
units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Headspace PID Reading (ppmv)				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Volatile Organic Compounds (VOCs) by EPA Method 8260C (mg/kg)																
Tetrachloroethene (PCE)	1	4	100	< 0.00469	< 0.00532	< 0.00546	< 0.00641	< 0.00984	< 0.00516	<0.00504	< 0.00526	<0.00492	< 0.00443	< 0.00521	< 0.00575	< 0.00.67
Trichloroethene (TCE)	0.3	0.3	30	< 0.00469	< 0.00532	< 0.00546	< 0.00641	< 0.00984	< 0.00516	<0.00504	< 0.00526	<0.00492	< 0.00443	< 0.00521	< 0.00575	< 0.00.67
cis-1,2-Dichloroethene	0.3	0.1	100	< 0.00469	< 0.00532	< 0.00546	< 0.00641	< 0.00984	< 0.00516	<0.00504	< 0.00526	<0.00492	< 0.00443	< 0.00521	< 0.00575	< 0.00.67
trans-1,2-Dichloroethane	1	1	500	< 0.00469	< 0.00532	< 0.00546	< 0.00641	< 0.00984	< 0.00516	<0.00504	< 0.00526	<0.00492	< 0.00443	< 0.00521	< 0.00575	< 0.00.67
1,2-Dichloroethane (total)	0.1	0.1	30	< 0.00469	< 0.00532	< 0.00546	< 0.00641	< 0.00984	< 0.00516	<0.00504	< 0.00526	<0.00492	< 0.00443	< 0.00521	< 0.00575	< 0.00.67
Vinyl chloride	0.3	0.3	0.3	< 0.00469	< 0.00532	< 0.00546	< 0.00641	< 0.00984	< 0.00516	<0.00504	< 0.00526	<0.00492	< 0.00443	< 0.00521	< 0.00575	< 0.00.67
Chlorobenzene	1	3	100	< 0.00469	< 0.00532	< 0.00546	< 0.00641	< 0.00984	< 0.00516	<0.00504	< 0.00526	<0.00492	< 0.00443	< 0.00521	< 0.00575	< 0.00.67
Methylene Chloride(Dichloromethane)	0.1	3	300	< 0.00938	< 0.0106	<0.0109	< 0.0128	< 0.0197	< 0.0103	< 0.0101	< 0.0105	< 0.0985	< 0.0887	< 0.0104	< 0.0115	< 0.00934
Toluene	30	500	500	< 0.00469	< 0.00532	< 0.00546	< 0.00641	< 0.00984	< 0.00516	<0.00504	< 0.00526	<0.00492	< 0.00443	< 0.00521	< 0.00575	< 0.00.67

Notes:

MCP = Massachusetts Contingency Plan; 310 CMR 40.0000 (3/1/24)

mg/Kg = milligrams per kilogram

Bold indicates detected above laboratory method reporting limit

Green shading indicates above Method 1 S-1 GW-1 Standard

Yellow shading indicates above Method 1 S-1/GW-1 and S-1/GW-2 Standard

NA = Not Analyzed

Table 1 - Soil Analytical Data Summary
Tufts Street - Somerville, MA

	MCP Method 1 Standards			ATC-7	ATC-8	ATC-8	ATC-1 to ATC-8 Composite	ATC-1 to ATC-8 Composite	50TUFT-B101	50TUFT-B101	50TUFT-B101	50TUFT-B102	50TUFT-B102	50TUFT-B103 (Not included in CID)	50TUFT-B103 (Not included in CID)	50TUFT-B103 (Not included in CID)
Laboratory ID				620-17450-12	620-17450-9	620-17450-10	620-17450-7	620-17450-8	L2408101-01	L2408101-02	L2408101-03	L2408101-04	L2408101-05	L2408101-06	L2408101-07	L2408101-08
Sample Depth (feet)	S-1/GW-1	S-1/GW-2	S-1/GW-3	5-10	0-5	5-10	0-5	5-10	0-1	1-3	3-5	0-1	1-3	0-1	1-3	3-5
Sample Collection Date				3/14/24	3/14/24	3/14/24	3/15/24	3/15/24	2/12/24	2/12/24	2/12/24	2/12/24	2/12/24	2/12/24	2/12/24	2/12/24
units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Headspace PID Reading (ppmv)				0.0	0.0	0.0	NA	NA	0.0	0.0	0.0	0.0	0.1	0.6	21.8	0.1
Volatile Organic Compounds (VOCs) by EPA Method 8260C (mg/kg)																
Tetrachloroethene (PCE)	1	4	100	< 0.0126	< 0.00619	0.0134	NA	NA	0.0023	<0.00033	0.015	0.00048	0.001	100	2.8	0.00052
Trichloroethene (TCE)	0.3	0.3	30	< 0.0126	< 0.00619	< 0.00494	NA	NA	<0.00037	<0.00033	<0.00026	<0.00032	0.00037	0.24	<0.031	<0.00032
cis-1,2-Dichloroethene	0.3	0.1	100	< 0.0126	< 0.00619	< 0.00494	NA	NA	<0.00074	<0.00066	<0.00051	<0.00064	<0.00058	0.094	<0.061	<0.00063
trans-1,2-Dichloroethane	1	1	500	< 0.0126	< 0.00619	< 0.00494	NA	NA	<0.00074	<0.00066	<0.00051	<0.00064	<0.00058	<0.046	<0.061	<0.00063
1,2-Dichloroethane (total)	0.1	0.1	30	< 0.0126	< 0.00619	< 0.00494	NA	NA	<0.00074	<0.00066	<0.00051	<0.00064	<0.00058	0.094	<0.061	<0.00063
Vinyl chloride	0.3	0.3	0.3	< 0.0126	< 0.00619	< 0.00494	NA	NA	<0.00074	<0.00066	<0.00051	<0.00064	<0.00058	<0.046	<0.061	<0.00063
Chlorobenzene	1	3	100	< 0.0126	< 0.00619	< 0.00494	NA	NA	<0.00037	<0.00033	<0.00026	<0.00032	<0.00029	<0.023	<0.031	<0.00032
Methylene Chloride(Dichloromethane)	0.1	3	300	< 0.0253	< 0.0124	< 0.00988	NA	NA	<0.0074	<0.0066	<0.0051	<0.0064	<0.0029	<0.230	<0.310	<0.0063
Toluene	30	500	500	< 0.0126	< 0.00619	< 0.00494	NA	NA	<0.00074	<0.00066	<0.00051	<0.00064	<0.00058	<0.046	<0.061	<0.00063

Notes:
MCP = Massachusetts Contingency Plan; 310 CMR 40.0000 (3/1/24)
mg/Kg = milligrams per kilogram
Bold indicates detected above laboratory method reporting limit
Green shading indicates above Method 1 S-1 GW-1 Standard
Yellow shading indicates above Method 1 S-1/GW-1 and S-1/GW-2 Standard
NA = Not Analyzed

Table 1 - Soil Analytical Data Summary
Tufts Street - Somerville, MA

	MCP Method 1 Standards			50TUFT-B104	50TUFT-B104	50TUFT-B104	50TUFT-B105	50TUFT-B105
Laboratory ID				L2408101-09	L2408101-10	L2408101-11	L2408101-12	L2408101-13
Sample Depth (feet)	S-1/GW-1	S-1/GW-2	S-1/GW-3	0-1	1-3	3-5	0-1	1-3
Sample Collection Date				2/12/24	2/12/24	2/12/24	2/12/24	2/12/24
units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Headspace PID Reading (ppmv)				0.1	0.9	0.3	0.0	0.1
Volatile Organic Compounds (VOCs) by EPA Method 8260C (mg/kg)								
Tetrachloroethene (PCE)	1	4	100	0.023	0.015	0.0024	0.81	0.01
Trichloroethene (TCE)	0.3	0.3	30	<0.00029	<0.00033	<0.00044	<0.022	<0.00061
cis-1,2-Dichloroethene	0.3	0.1	100	<0.00057	<0.00067	<0.00088	<0.044	<0.0012
trans-1,2-Dichloroethane	1	1	500	<0.00057	<0.00067	<0.00088	<0.044	<0.0012
1,2-Dichloroethane (total)	0.1	0.1	30	<0.00057	<0.00067	<0.00088	<0.044	<0.0012
Vinyl chloride	0.3	0.3	0.3	<0.00057	<0.00067	<0.00088	0.053	<0.0012
Chlorobenzene	1	3	100	<0.00029	<0.00033	<0.00044	<0.022	<0.00061
Methylene Chloride(Dichloromethane)	0.1	3	300	<0.0057	<0.0067	<0.0088	<0.220	<0.0061
Toluene	30	500	500	<0.00057	<0.00067	<0.00088	0.053	<0.0012

Notes:

MCP = Massachusetts Contingency Plan; 310 CMR 40.0000 (3/1/24)

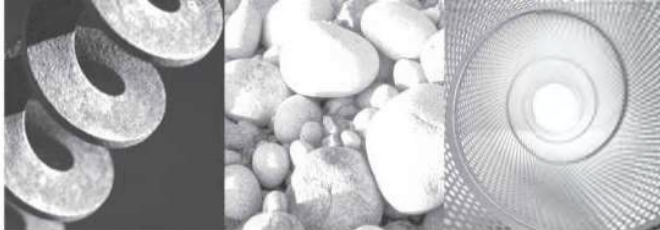
mg/Kg = milligrams per kilogram

Bold indicates detected above laboratory method reporting limit

Green shading indicates above Method 1 S-1 GW-1 Standard

Yellow shading indicates above Method 1 S-1/GW-1 and S-1/GW-2 Standard

NA = Not Analyzed



MassDEP RTN 3-23246

Phase V Status Report No. 26 and Remedial Monitoring Report No. 41

50 Tufts Street, Somerville, Massachusetts

Submitted to:

UniFirst Corporation
68 Jonspin Road
Wilmington, MA 01887

Submitted by:

GEI Consultants, Inc.
400 Unicorn Park Drive
Woburn, MA 01801
781.721.4000

August 7, 2024
Project No. 04516-3



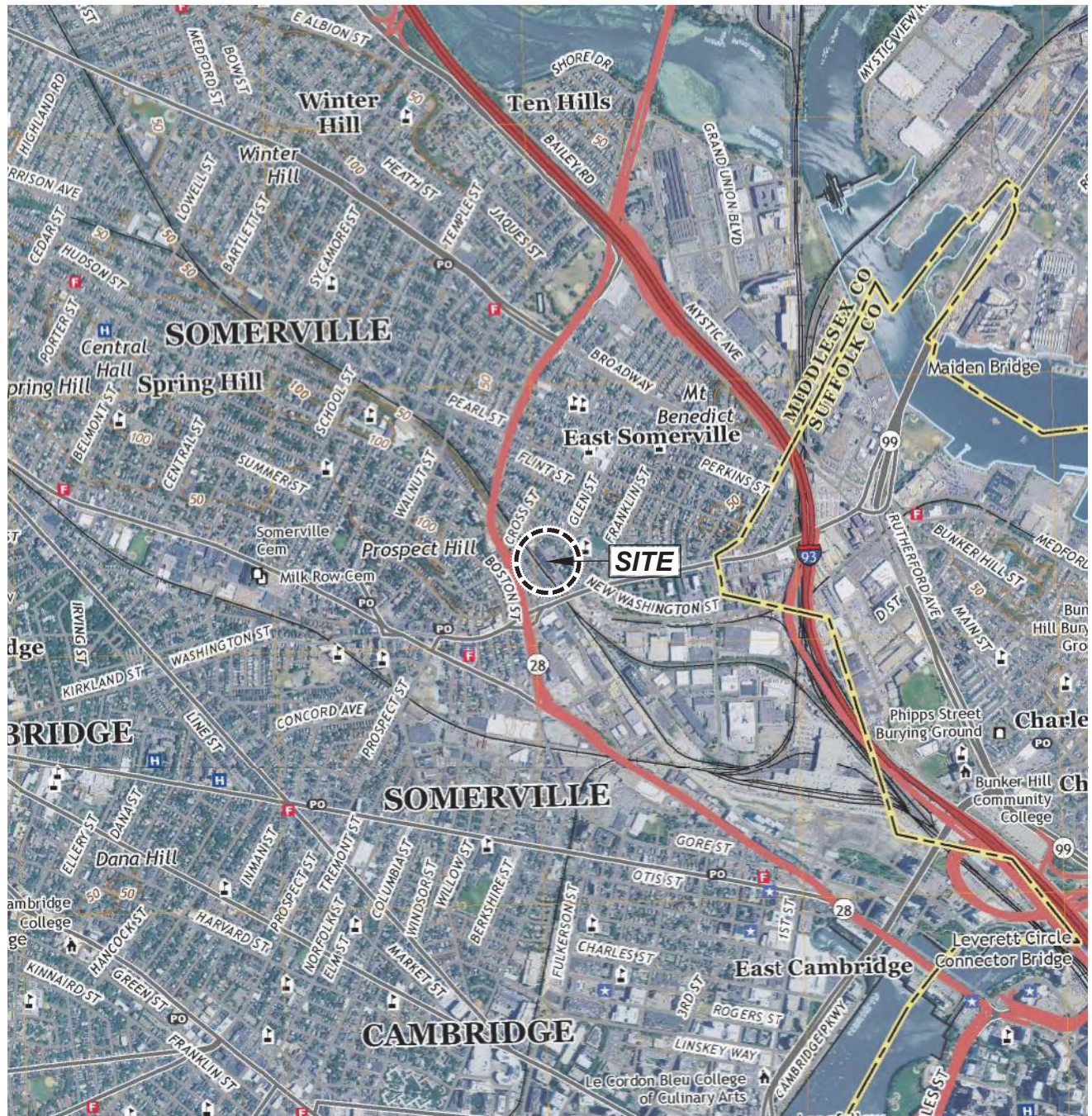
Christopher O. Coner, CHMM
Project Manager

Ileen S. Gladstone, P.E., LSP, LEED AP
Senior Vice President

Table 10-1. Chemical Testing Results - 50 Tufts Street Shallow Soil
Phase V Status Report No. 26 and Remedial Monitoring Report No. 41
50 Tufts Street
Somerville, Massachusetts

Sample ID: 50TUFT-B101(0-1) Sample Date: 2/12/2024 Sample Depth (ft): 0-1			50TUFT-B101(1-3) 2/12/2024 1-3	50TUFT-B101(3-5) 2/12/2024 3-5	50TUFT-B102(0-1) 2/12/2024 0-1	50TUFT-B102(1-3) 2/12/2024 1-3	50TUFT-B103(0-1) 2/12/2024 0-1	50TUFT-B103(1-3) 2/12/2024 1-3	50TUFT-B103(3-5) 2/12/2024 3-5	50TUFT-B104(0-1) 2/12/2024 0-1	50TUFT-B104(1-3) 2/12/2024 1-3	50TUFT-B104(3-5) 2/12/2024 3-5	50TUFT-B105(0-1) 2/12/2024 0-1	50TUFT-B105(1-3) 2/12/2024 1-3	
Analyte	MCP Upper Concentration Limit (UCL)	Units													
Volatile Organics Compounds (VOCs)			mg/kg												
1,2-Dichloroethene, Total			<0.00074	<0.00066	<0.00051	<0.00064	<0.00058	0.094	<0.061	<0.00063	<0.00057	<0.00067	<0.00088	<0.044	<0.0012
cis-1,2-Dichloroethene	5000		<0.00074	<0.00066	<0.00051	<0.00064	<0.00058	0.094	<0.061	<0.00063	<0.00057	<0.00067	<0.00088	<0.044	<0.0012
Tetrachloroethene	10000		0.0023	<0.00033	0.015	0.00048	0.001	100	2.8	0.00052	0.023	0.015	0.0024	0.81	0.01
Toluene	10000		<0.00074	<0.00066	<0.00051	<0.00064	<0.00058	<0.046	<0.061	<0.00063	<0.00057	<0.00067	<0.00088	0.053	<0.0012
Trichloroethene	600		<0.00037	<0.00033	<0.00026	<0.00032	0.00037	0.24	<0.031	<0.00032	<0.00029	<0.00033	<0.00044	<0.022	<0.00061
General Chemistry															
Solids, Total		%	80	89.7	91.1	93.6	91.6	90.1	81.4	85.7	90.8	79.6	82.3	92.1	82.8

Figures



This Image is from U.S.G.S. Topographic 7.5 Minute Series
 Boston North, MA Quadrangle, 2018.
 Datum is North American Vertical Datum of 1988 (NAVD88).
 Contour Interval is 10 Feet.



Phase V Status Report No. 26 and
 Remedial Monitoring Report No. 41
 50 Tufts Street Somerville, Massachusetts

UniFirst Corporation
 Wilmington, Massachusetts

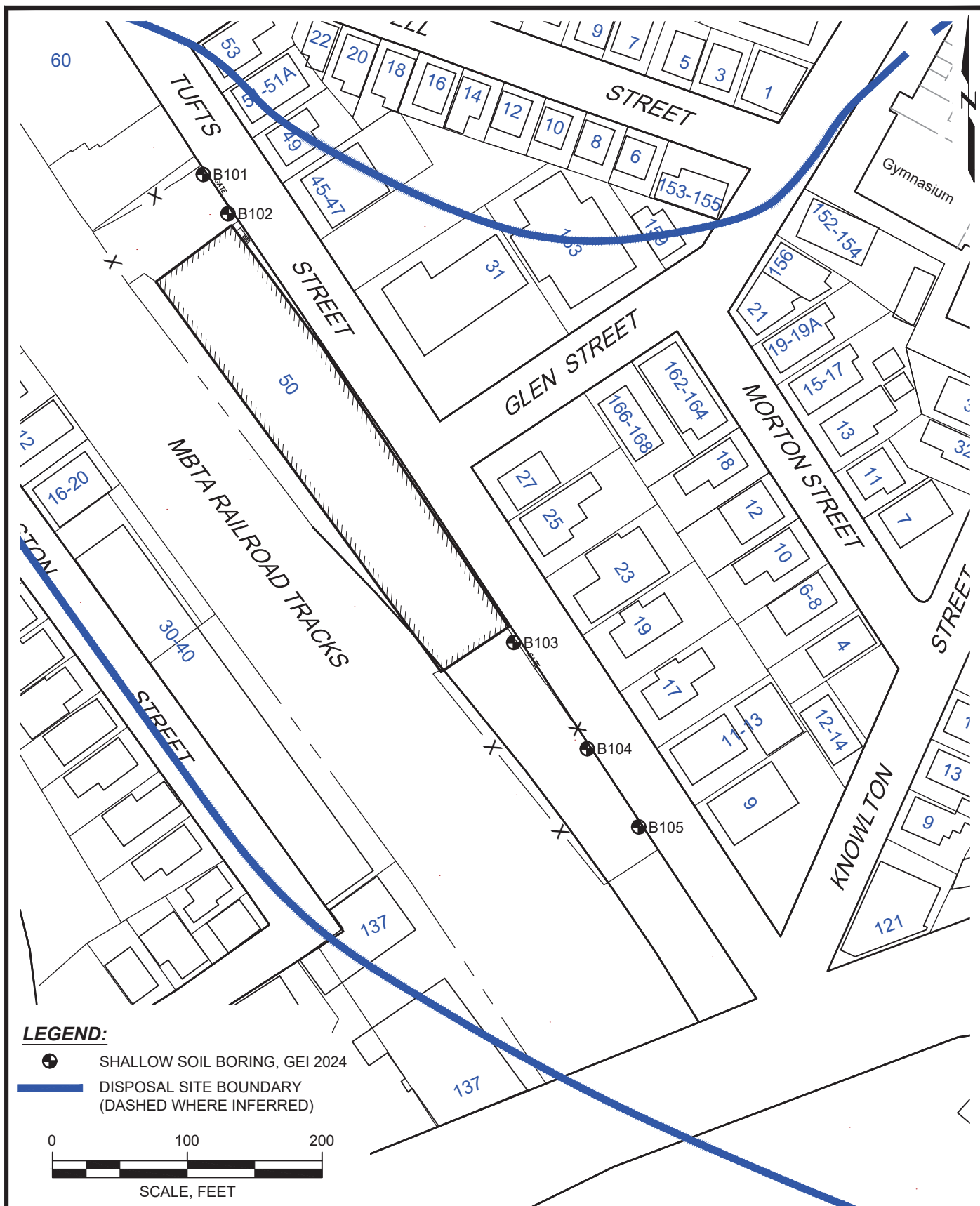


Project 04516-3

SITE LOCATION MAP

August 2024

Fig. 1



Phase V Status Report No. 26 and RMR No. 41
50 Tufts Street
Somerville, Massachusetts

Wooden Teeth LLC
Wilmington, Massachusetts



Project 045163

50 TUFTS STREET
SHALLOW SOIL BORING PLAN

August 2024

Fig. 10-1



ANALYTICAL REPORT

Lab Number:	L2408101
Client:	GEI Consultants 400 Unicorn Park Drive Woburn, MA 01801
ATTN:	Chris Coner
Phone:	(781) 721-4000
Project Name:	TUFTS STREET
Project Number:	045163
Report Date:	02/21/24

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OH (CL108), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2408101
Report Date: 02/21/24

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2408101-01	50TUFT-B101(0-1)	SOIL	SOMERVILLE, MA	02/12/24 08:30	02/14/24
L2408101-02	50TUFT-B101(1-3)	SOIL	SOMERVILLE, MA	02/12/24 08:31	02/14/24
L2408101-03	50TUFT-B101(3-5)	SOIL	SOMERVILLE, MA	02/12/24 08:32	02/14/24
L2408101-04	50TUFT-B102(0-1)	SOIL	SOMERVILLE, MA	02/12/24 09:00	02/14/24
L2408101-05	50TUFT-B102(1-3)	SOIL	SOMERVILLE, MA	02/12/24 09:01	02/14/24
L2408101-06	50TUFT-B103(0-1)	SOIL	SOMERVILLE, MA	02/12/24 09:30	02/14/24
L2408101-07	50TUFT-B103(1-3)	SOIL	SOMERVILLE, MA	02/12/24 09:31	02/14/24
L2408101-08	50TUFT-B103(3-5)	SOIL	SOMERVILLE, MA	02/12/24 09:32	02/14/24
L2408101-09	50TUFT-B104(0-1)	SOIL	SOMERVILLE, MA	02/12/24 10:00	02/14/24
L2408101-10	50TUFT-B104(1-3)	SOIL	SOMERVILLE, MA	02/12/24 10:01	02/14/24
L2408101-11	50TUFT-B104(3-5)	SOIL	SOMERVILLE, MA	02/12/24 10:02	02/14/24
L2408101-12	50TUFT-B105(0-1)	SOIL	SOMERVILLE, MA	02/12/24 11:00	02/14/24
L2408101-13	50TUFT-B105(1-3)	SOIL	SOMERVILLE, MA	02/12/24 11:01	02/14/24

Project Name: TUFTS STREET

Lab Number: L2408101

Project Number: 045163

Report Date: 02/21/24

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES
A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	NO
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	NO
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	YES
For any questions answered "No", please refer to the case narrative section on the following page(s).		

Please note that sample matrix information is located in the Sample Results section of this report.



Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2408101
Report Date: 02/21/24

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2408101
Report Date: 02/21/24

Case Narrative (continued)

MCP Related Narratives

Volatile Organics

L2408101-06: Initial calibration utilized a quadratic fit for: 1,1-dichloropropene

L2408101-06D: A copy of the continuing calibration standard is included as an addendum to this report.

In reference to question G:

L2408101-06, -07, and -12: One or more of the target analytes did not achieve the requested CAM reporting limits.

In reference to question H:

The WG1887347-5 Method Blank, associated with L2408101-06, has a concentration above the reporting limit for chloroform. Since the associated sample concentration is either greater than 10x the blank concentration or non-detect to the RL for this target analyte, no corrective action is required. Any result detected below the reporting limit is qualified with a "B".

L2408101-01, -02, -03, -04, -05, -07, -08, -09, -10, -11, -12, and -13: Initial Calibration did not meet:

Lowest Calibration Standard Minimum Response Factor: bromochloromethane (0.0979), bromodichloromethane (0.2758), 1,4-dioxane (0.0014), cis-1,3-dichloropropene (0.2950), 1,1,2-trichloroethane (0.1932)

Average Response Factor: 1,4-dioxane

Verification: carbon disulfide (69%)

L2408101-06: Initial Calibration did not meet:

Lowest Calibration Standard Minimum Response Factor: 1,4-dioxane (0.0018)

Average Response Factor: 1,4-dioxane

L2408101-01, -02, -03, -04, -05, -06, -07, -08, -09, -10, -11, -12, and -13: The associated continuing calibration standard is outside the acceptance criteria for several compounds; however, it is within overall method allowances. Associated results are considered to be biased high if the %D is negative and biased low if the %D is positive. A copy of the continuing calibration standard is included as an addendum to this report.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:



Kelly O'Neill

Title: Technical Director/Representative

Date: 02/21/24

QC OUTLIER SUMMARY REPORT

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2408101

Report Date: 02/21/24

Method	Client ID (Native ID)	Lab ID	Parameter	QC Type	Recovery/RPD (%)	QC Limits (%)	Associated Samples	Data Quality Assessment
MCP Volatile Organics by EPA 5035 High - Westborough Lab								
8260D	Batch QC	WG1886042-3	Chloromethane	LCS	67	70-130	07,12	potential low bias
8260D	Batch QC	WG1886042-3	1,1-Dichloroethene	LCS	68	70-130	07,12	potential low bias
8260D	Batch QC	WG1886042-3	Dichlorodifluoromethane	LCS	62	70-130	07,12	potential low bias
8260D	Batch QC	WG1886042-3	Acetone	LCS	64	70-130	07,12	potential low bias
8260D	Batch QC	WG1886042-3	Carbon disulfide	LCS	68	70-130	07,12	potential low bias
8260D	Batch QC	WG1886042-3	Tetrahydrofuran	LCS	65	70-130	07,12	potential low bias
8260D	Batch QC	WG1886042-4	Chloromethane	LCSD	67	70-130	07,12	potential low bias
8260D	Batch QC	WG1886042-4	1,1-Dichloroethene	LCSD	68	70-130	07,12	potential low bias
8260D	Batch QC	WG1886042-4	Dichlorodifluoromethane	LCSD	62	70-130	07,12	potential low bias
8260D	Batch QC	WG1886042-4	Acetone	LCSD	64	70-130	07,12	potential low bias
8260D	Batch QC	WG1886042-4	Carbon disulfide	LCSD	68	70-130	07,12	potential low bias
8260D	Batch QC	WG1886042-4	Tetrahydrofuran	LCSD	64	70-130	07,12	potential low bias
8260D	Batch QC	WG1887347-3	Chloromethane	LCS	68	70-130	06	potential low bias
8260D	Batch QC	WG1887347-3	Dichlorodifluoromethane	LCS	49	70-130	06	potential low bias
8260D	Batch QC	WG1887347-3	Acetone	LCS	68	70-130	06	potential low bias
8260D	Batch QC	WG1887347-3	Methyl ethyl ketone	LCS	62	70-130	06	potential low bias
8260D	Batch QC	WG1887347-3	Methyl isobutyl ketone	LCS	69	70-130	06	potential low bias
8260D	Batch QC	WG1887347-3	2-Hexanone	LCS	64	70-130	06	potential low bias
8260D	Batch QC	WG1887347-3	Tetrahydrofuran	LCS	58	70-130	06	potential low bias
8260D	Batch QC	WG1887347-4	Chloromethane	LCSD	64	70-130	06	potential low bias
8260D	Batch QC	WG1887347-4	Dichlorodifluoromethane	LCSD	46	70-130	06	potential low bias
8260D	Batch QC	WG1887347-4	Acetone	LCSD	67	70-130	06	potential low bias
8260D	Batch QC	WG1887347-4	Methyl ethyl ketone	LCSD	65	70-130	06	potential low bias
8260D	Batch QC	WG1887347-4	2-Hexanone	LCSD	65	70-130	06	potential low bias
8260D	Batch QC	WG1887347-4	Tetrahydrofuran	LCSD	63	70-130	06	potential low bias
8260D	Batch QC	WG1887734-3	Chloromethane	LCS	66	70-130	06	potential low bias
8260D	Batch QC	WG1887734-3	Dichlorodifluoromethane	LCS	41	70-130	06	potential low bias
8260D	Batch QC	WG1887734-3	Methyl ethyl ketone	LCS	68	70-130	06	potential low bias
8260D	Batch QC	WG1887734-3	2-Hexanone	LCS	69	70-130	06	potential low bias

QC OUTLIER SUMMARY REPORT

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2408101

Report Date: 02/21/24

Method	Client ID (Native ID)	Lab ID	Parameter	QC Type	Recovery/RPD (%)	QC Limits (%)	Associated Samples	Data Quality Assessment
8260D	Batch QC	WG1887734-3	Tetrahydrofuran	LCS	64	70-130	06	potential low bias
8260D	Batch QC	WG1887734-4	Chloromethane	LCSD	65	70-130	06	potential low bias
8260D	Batch QC	WG1887734-4	Dichlorodifluoromethane	LCSD	41	70-130	06	potential low bias
8260D	Batch QC	WG1887734-4	Acetone	LCSD	69	70-130	06	potential low bias
8260D	Batch QC	WG1887734-4	Tetrahydrofuran	LCSD	64	70-130	06	potential low bias
MCP Volatile Organics by EPA 5035 Low - Westborough Lab								
8260D	Batch QC	WG1886062-3	Chloromethane	LCS	67	70-130	01-05,08-11,13	potential low bias
8260D	Batch QC	WG1886062-3	1,1-Dichloroethene	LCS	68	70-130	01-05,08-11,13	potential low bias
8260D	Batch QC	WG1886062-3	Dichlorodifluoromethane	LCS	62	70-130	01-05,08-11,13	potential low bias
8260D	Batch QC	WG1886062-3	Acetone	LCS	64	70-130	01-05,08-11,13	potential low bias
8260D	Batch QC	WG1886062-3	Carbon disulfide	LCS	68	70-130	01-05,08-11,13	potential low bias
8260D	Batch QC	WG1886062-3	Tetrahydrofuran	LCS	65	70-130	01-05,08-11,13	potential low bias
8260D	Batch QC	WG1886062-4	Chloromethane	LCSD	67	70-130	01-05,08-11,13	potential low bias
8260D	Batch QC	WG1886062-4	1,1-Dichloroethene	LCSD	68	70-130	01-05,08-11,13	potential low bias
8260D	Batch QC	WG1886062-4	Dichlorodifluoromethane	LCSD	62	70-130	01-05,08-11,13	potential low bias
8260D	Batch QC	WG1886062-4	Acetone	LCSD	64	70-130	01-05,08-11,13	potential low bias
8260D	Batch QC	WG1886062-4	Carbon disulfide	LCSD	68	70-130	01-05,08-11,13	potential low bias
8260D	Batch QC	WG1886062-4	Tetrahydrofuran	LCSD	64	70-130	01-05,08-11,13	potential low bias

ORGANICS

VOLATILES

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-01
 Client ID: 50TUFT-B101(0-1)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 08:30
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 141,8260D
 Analytical Date: 02/15/24 15:23
 Analyst: MAG
 Percent Solids: 80%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	3.7	--	1
1,1-Dichloroethane	ND		ug/kg	0.74	--	1
Chloroform	ND		ug/kg	1.1	--	1
Carbon tetrachloride	ND		ug/kg	0.74	--	1
1,2-Dichloropropane	ND		ug/kg	0.74	--	1
Dibromochloromethane	ND		ug/kg	0.74	--	1
1,1,2-Trichloroethane	ND		ug/kg	0.74	--	1
Tetrachloroethene	2.3		ug/kg	0.37	--	1
Chlorobenzene	ND		ug/kg	0.37	--	1
Trichlorofluoromethane	ND		ug/kg	2.9	--	1
1,2-Dichloroethane	ND		ug/kg	0.74	--	1
1,1,1-Trichloroethane	ND		ug/kg	0.37	--	1
Bromodichloromethane	ND		ug/kg	0.37	--	1
trans-1,3-Dichloropropene	ND		ug/kg	0.74	--	1
cis-1,3-Dichloropropene	ND		ug/kg	0.37	--	1
1,3-Dichloropropene, Total	ND		ug/kg	0.37	--	1
1,1-Dichloropropene	ND		ug/kg	0.37	--	1
Bromoform	ND		ug/kg	2.9	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.37	--	1
Benzene	ND		ug/kg	0.37	--	1
Toluene	ND		ug/kg	0.74	--	1
Ethylbenzene	ND		ug/kg	0.74	--	1
Chloromethane	ND		ug/kg	2.9	--	1
Bromomethane	ND		ug/kg	1.5	--	1
Vinyl chloride	ND		ug/kg	0.74	--	1
Chloroethane	ND		ug/kg	1.5	--	1
1,1-Dichloroethene	ND		ug/kg	0.74	--	1
trans-1,2-Dichloroethene	ND		ug/kg	1.1	--	1

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-01
 Client ID: 50TUFT-B101(0-1)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 08:30
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.37	--	1
1,2-Dichlorobenzene	ND		ug/kg	1.5	--	1
1,3-Dichlorobenzene	ND		ug/kg	1.5	--	1
1,4-Dichlorobenzene	ND		ug/kg	1.5	--	1
Methyl tert butyl ether	ND		ug/kg	1.5	--	1
p/m-Xylene	ND		ug/kg	1.5	--	1
o-Xylene	ND		ug/kg	0.74	--	1
Xylenes, Total	ND		ug/kg	0.74	--	1
cis-1,2-Dichloroethene	ND		ug/kg	0.74	--	1
1,2-Dichloroethene, Total	ND		ug/kg	0.74	--	1
Dibromomethane	ND		ug/kg	1.5	--	1
1,2,3-Trichloropropane	ND		ug/kg	1.5	--	1
Styrene	ND		ug/kg	0.74	--	1
Dichlorodifluoromethane	ND		ug/kg	7.4	--	1
Acetone	ND		ug/kg	18	--	1
Carbon disulfide	ND		ug/kg	7.4	--	1
Methyl ethyl ketone	ND		ug/kg	7.4	--	1
Methyl isobutyl ketone	ND		ug/kg	7.4	--	1
2-Hexanone	ND		ug/kg	7.4	--	1
Bromochloromethane	ND		ug/kg	1.5	--	1
Tetrahydrofuran	ND		ug/kg	2.9	--	1
2,2-Dichloropropane	ND		ug/kg	1.5	--	1
1,2-Dibromoethane	ND		ug/kg	0.74	--	1
1,3-Dichloropropane	ND		ug/kg	1.5	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.37	--	1
Bromobenzene	ND		ug/kg	1.5	--	1
n-Butylbenzene	ND		ug/kg	0.74	--	1
sec-Butylbenzene	ND		ug/kg	0.74	--	1
tert-Butylbenzene	ND		ug/kg	1.5	--	1
o-Chlorotoluene	ND		ug/kg	1.5	--	1
p-Chlorotoluene	ND		ug/kg	1.5	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.2	--	1
Hexachlorobutadiene	ND		ug/kg	2.9	--	1
Isopropylbenzene	ND		ug/kg	0.74	--	1
p-Isopropyltoluene	ND		ug/kg	0.74	--	1
Naphthalene	ND		ug/kg	2.9	--	1
n-Propylbenzene	ND		ug/kg	0.74	--	1

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-01
 Client ID: 50TUFT-B101(0-1)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 08:30
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/kg	1.5	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.5	--	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.5	--	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.5	--	1
Diethyl ether	ND		ug/kg	1.5	--	1
Diisopropyl Ether	ND		ug/kg	1.5	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	1.5	--	1
Tertiary-Amyl Methyl Ether	ND		ug/kg	1.5	--	1
1,4-Dioxane	ND		ug/kg	59	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	95		70-130

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-02
 Client ID: 50TUFT-B101(1-3)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 08:31
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 141,8260D
 Analytical Date: 02/15/24 15:54
 Analyst: MAG
 Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	3.3	--	1
1,1-Dichloroethane	ND		ug/kg	0.66	--	1
Chloroform	ND		ug/kg	0.99	--	1
Carbon tetrachloride	ND		ug/kg	0.66	--	1
1,2-Dichloropropane	ND		ug/kg	0.66	--	1
Dibromochloromethane	ND		ug/kg	0.66	--	1
1,1,2-Trichloroethane	ND		ug/kg	0.66	--	1
Tetrachloroethene	ND		ug/kg	0.33	--	1
Chlorobenzene	ND		ug/kg	0.33	--	1
Trichlorofluoromethane	ND		ug/kg	2.6	--	1
1,2-Dichloroethane	ND		ug/kg	0.66	--	1
1,1,1-Trichloroethane	ND		ug/kg	0.33	--	1
Bromodichloromethane	ND		ug/kg	0.33	--	1
trans-1,3-Dichloropropene	ND		ug/kg	0.66	--	1
cis-1,3-Dichloropropene	ND		ug/kg	0.33	--	1
1,3-Dichloropropene, Total	ND		ug/kg	0.33	--	1
1,1-Dichloropropene	ND		ug/kg	0.33	--	1
Bromoform	ND		ug/kg	2.6	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.33	--	1
Benzene	ND		ug/kg	0.33	--	1
Toluene	ND		ug/kg	0.66	--	1
Ethylbenzene	ND		ug/kg	0.66	--	1
Chloromethane	ND		ug/kg	2.6	--	1
Bromomethane	ND		ug/kg	1.3	--	1
Vinyl chloride	ND		ug/kg	0.66	--	1
Chloroethane	ND		ug/kg	1.3	--	1
1,1-Dichloroethene	ND		ug/kg	0.66	--	1
trans-1,2-Dichloroethene	ND		ug/kg	0.99	--	1

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-02
 Client ID: 50TUFT-B101(1-3)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 08:31
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.33	--	1
1,2-Dichlorobenzene	ND		ug/kg	1.3	--	1
1,3-Dichlorobenzene	ND		ug/kg	1.3	--	1
1,4-Dichlorobenzene	ND		ug/kg	1.3	--	1
Methyl tert butyl ether	ND		ug/kg	1.3	--	1
p/m-Xylene	ND		ug/kg	1.3	--	1
o-Xylene	ND		ug/kg	0.66	--	1
Xylenes, Total	ND		ug/kg	0.66	--	1
cis-1,2-Dichloroethene	ND		ug/kg	0.66	--	1
1,2-Dichloroethene, Total	ND		ug/kg	0.66	--	1
Dibromomethane	ND		ug/kg	1.3	--	1
1,2,3-Trichloropropane	ND		ug/kg	1.3	--	1
Styrene	ND		ug/kg	0.66	--	1
Dichlorodifluoromethane	ND		ug/kg	6.6	--	1
Acetone	ND		ug/kg	16	--	1
Carbon disulfide	ND		ug/kg	6.6	--	1
Methyl ethyl ketone	ND		ug/kg	6.6	--	1
Methyl isobutyl ketone	ND		ug/kg	6.6	--	1
2-Hexanone	ND		ug/kg	6.6	--	1
Bromochloromethane	ND		ug/kg	1.3	--	1
Tetrahydrofuran	ND		ug/kg	2.6	--	1
2,2-Dichloropropane	ND		ug/kg	1.3	--	1
1,2-Dibromoethane	ND		ug/kg	0.66	--	1
1,3-Dichloropropane	ND		ug/kg	1.3	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.33	--	1
Bromobenzene	ND		ug/kg	1.3	--	1
n-Butylbenzene	ND		ug/kg	0.66	--	1
sec-Butylbenzene	ND		ug/kg	0.66	--	1
tert-Butylbenzene	ND		ug/kg	1.3	--	1
o-Chlorotoluene	ND		ug/kg	1.3	--	1
p-Chlorotoluene	ND		ug/kg	1.3	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.0	--	1
Hexachlorobutadiene	ND		ug/kg	2.6	--	1
Isopropylbenzene	ND		ug/kg	0.66	--	1
p-Isopropyltoluene	ND		ug/kg	0.66	--	1
Naphthalene	ND		ug/kg	2.6	--	1
n-Propylbenzene	ND		ug/kg	0.66	--	1

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-02
 Client ID: 50TUFT-B101(1-3)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 08:31
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/kg	1.3	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.3	--	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.3	--	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.3	--	1
Diethyl ether	ND		ug/kg	1.3	--	1
Diisopropyl Ether	ND		ug/kg	1.3	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	1.3	--	1
Tertiary-Amyl Methyl Ether	ND		ug/kg	1.3	--	1
1,4-Dioxane	ND		ug/kg	53	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	90		70-130
4-Bromofluorobenzene	89		70-130
Dibromofluoromethane	94		70-130

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-03
 Client ID: 50TUFT-B101(3-5)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 08:32
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 141,8260D
 Analytical Date: 02/15/24 16:24
 Analyst: MAG
 Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	2.6	--	1
1,1-Dichloroethane	ND		ug/kg	0.51	--	1
Chloroform	ND		ug/kg	0.77	--	1
Carbon tetrachloride	ND		ug/kg	0.51	--	1
1,2-Dichloropropane	ND		ug/kg	0.51	--	1
Dibromochloromethane	ND		ug/kg	0.51	--	1
1,1,2-Trichloroethane	ND		ug/kg	0.51	--	1
Tetrachloroethene	15		ug/kg	0.26	--	1
Chlorobenzene	ND		ug/kg	0.26	--	1
Trichlorofluoromethane	ND		ug/kg	2.0	--	1
1,2-Dichloroethane	ND		ug/kg	0.51	--	1
1,1,1-Trichloroethane	ND		ug/kg	0.26	--	1
Bromodichloromethane	ND		ug/kg	0.26	--	1
trans-1,3-Dichloropropene	ND		ug/kg	0.51	--	1
cis-1,3-Dichloropropene	ND		ug/kg	0.26	--	1
1,3-Dichloropropene, Total	ND		ug/kg	0.26	--	1
1,1-Dichloropropene	ND		ug/kg	0.26	--	1
Bromoform	ND		ug/kg	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.26	--	1
Benzene	ND		ug/kg	0.26	--	1
Toluene	ND		ug/kg	0.51	--	1
Ethylbenzene	ND		ug/kg	0.51	--	1
Chloromethane	ND		ug/kg	2.0	--	1
Bromomethane	ND		ug/kg	1.0	--	1
Vinyl chloride	ND		ug/kg	0.51	--	1
Chloroethane	ND		ug/kg	1.0	--	1
1,1-Dichloroethene	ND		ug/kg	0.51	--	1
trans-1,2-Dichloroethene	ND		ug/kg	0.77	--	1

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-03
 Client ID: 50TUFT-B101(3-5)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 08:32
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.26	--	1
1,2-Dichlorobenzene	ND		ug/kg	1.0	--	1
1,3-Dichlorobenzene	ND		ug/kg	1.0	--	1
1,4-Dichlorobenzene	ND		ug/kg	1.0	--	1
Methyl tert butyl ether	ND		ug/kg	1.0	--	1
p/m-Xylene	ND		ug/kg	1.0	--	1
o-Xylene	ND		ug/kg	0.51	--	1
Xylenes, Total	ND		ug/kg	0.51	--	1
cis-1,2-Dichloroethene	ND		ug/kg	0.51	--	1
1,2-Dichloroethene, Total	ND		ug/kg	0.51	--	1
Dibromomethane	ND		ug/kg	1.0	--	1
1,2,3-Trichloropropane	ND		ug/kg	1.0	--	1
Styrene	ND		ug/kg	0.51	--	1
Dichlorodifluoromethane	ND		ug/kg	5.1	--	1
Acetone	ND		ug/kg	13	--	1
Carbon disulfide	ND		ug/kg	5.1	--	1
Methyl ethyl ketone	ND		ug/kg	5.1	--	1
Methyl isobutyl ketone	ND		ug/kg	5.1	--	1
2-Hexanone	ND		ug/kg	5.1	--	1
Bromochloromethane	ND		ug/kg	1.0	--	1
Tetrahydrofuran	ND		ug/kg	2.0	--	1
2,2-Dichloropropane	ND		ug/kg	1.0	--	1
1,2-Dibromoethane	ND		ug/kg	0.51	--	1
1,3-Dichloropropane	ND		ug/kg	1.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.26	--	1
Bromobenzene	ND		ug/kg	1.0	--	1
n-Butylbenzene	ND		ug/kg	0.51	--	1
sec-Butylbenzene	ND		ug/kg	0.51	--	1
tert-Butylbenzene	ND		ug/kg	1.0	--	1
o-Chlorotoluene	ND		ug/kg	1.0	--	1
p-Chlorotoluene	ND		ug/kg	1.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	1.5	--	1
Hexachlorobutadiene	ND		ug/kg	2.0	--	1
Isopropylbenzene	ND		ug/kg	0.51	--	1
p-Isopropyltoluene	ND		ug/kg	0.51	--	1
Naphthalene	ND		ug/kg	2.0	--	1
n-Propylbenzene	ND		ug/kg	0.51	--	1



Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-03
 Client ID: 50TUFT-B101(3-5)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 08:32
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/kg	1.0	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.0	--	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.0	--	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.0	--	1
Diethyl ether	ND		ug/kg	1.0	--	1
Diisopropyl Ether	ND		ug/kg	1.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	1.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/kg	1.0	--	1
1,4-Dioxane	ND		ug/kg	41	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	92		70-130
Toluene-d8	90		70-130
4-Bromofluorobenzene	91		70-130
Dibromofluoromethane	93		70-130

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-04
 Client ID: 50TUFT-B102(0-1)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 09:00
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 141,8260D
 Analytical Date: 02/15/24 16:54
 Analyst: MAG
 Percent Solids: 94%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	3.2	--	1
1,1-Dichloroethane	ND		ug/kg	0.64	--	1
Chloroform	ND		ug/kg	0.95	--	1
Carbon tetrachloride	ND		ug/kg	0.64	--	1
1,2-Dichloropropane	ND		ug/kg	0.64	--	1
Dibromochloromethane	ND		ug/kg	0.64	--	1
1,1,2-Trichloroethane	ND		ug/kg	0.64	--	1
Tetrachloroethene	0.48		ug/kg	0.32	--	1
Chlorobenzene	ND		ug/kg	0.32	--	1
Trichlorofluoromethane	ND		ug/kg	2.5	--	1
1,2-Dichloroethane	ND		ug/kg	0.64	--	1
1,1,1-Trichloroethane	ND		ug/kg	0.32	--	1
Bromodichloromethane	ND		ug/kg	0.32	--	1
trans-1,3-Dichloropropene	ND		ug/kg	0.64	--	1
cis-1,3-Dichloropropene	ND		ug/kg	0.32	--	1
1,3-Dichloropropene, Total	ND		ug/kg	0.32	--	1
1,1-Dichloropropene	ND		ug/kg	0.32	--	1
Bromoform	ND		ug/kg	2.5	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.32	--	1
Benzene	ND		ug/kg	0.32	--	1
Toluene	ND		ug/kg	0.64	--	1
Ethylbenzene	ND		ug/kg	0.64	--	1
Chloromethane	ND		ug/kg	2.5	--	1
Bromomethane	ND		ug/kg	1.3	--	1
Vinyl chloride	ND		ug/kg	0.64	--	1
Chloroethane	ND		ug/kg	1.3	--	1
1,1-Dichloroethene	ND		ug/kg	0.64	--	1
trans-1,2-Dichloroethene	ND		ug/kg	0.95	--	1

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-04
 Client ID: 50TUFT-B102(0-1)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 09:00
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.32	--	1
1,2-Dichlorobenzene	ND		ug/kg	1.3	--	1
1,3-Dichlorobenzene	ND		ug/kg	1.3	--	1
1,4-Dichlorobenzene	ND		ug/kg	1.3	--	1
Methyl tert butyl ether	ND		ug/kg	1.3	--	1
p/m-Xylene	ND		ug/kg	1.3	--	1
o-Xylene	ND		ug/kg	0.64	--	1
Xylenes, Total	ND		ug/kg	0.64	--	1
cis-1,2-Dichloroethene	ND		ug/kg	0.64	--	1
1,2-Dichloroethene, Total	ND		ug/kg	0.64	--	1
Dibromomethane	ND		ug/kg	1.3	--	1
1,2,3-Trichloropropane	ND		ug/kg	1.3	--	1
Styrene	ND		ug/kg	0.64	--	1
Dichlorodifluoromethane	ND		ug/kg	6.4	--	1
Acetone	ND		ug/kg	16	--	1
Carbon disulfide	ND		ug/kg	6.4	--	1
Methyl ethyl ketone	ND		ug/kg	6.4	--	1
Methyl isobutyl ketone	ND		ug/kg	6.4	--	1
2-Hexanone	ND		ug/kg	6.4	--	1
Bromochloromethane	ND		ug/kg	1.3	--	1
Tetrahydrofuran	ND		ug/kg	2.5	--	1
2,2-Dichloropropane	ND		ug/kg	1.3	--	1
1,2-Dibromoethane	ND		ug/kg	0.64	--	1
1,3-Dichloropropane	ND		ug/kg	1.3	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.32	--	1
Bromobenzene	ND		ug/kg	1.3	--	1
n-Butylbenzene	ND		ug/kg	0.64	--	1
sec-Butylbenzene	ND		ug/kg	0.64	--	1
tert-Butylbenzene	ND		ug/kg	1.3	--	1
o-Chlorotoluene	ND		ug/kg	1.3	--	1
p-Chlorotoluene	ND		ug/kg	1.3	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	1.9	--	1
Hexachlorobutadiene	ND		ug/kg	2.5	--	1
Isopropylbenzene	ND		ug/kg	0.64	--	1
p-Isopropyltoluene	ND		ug/kg	0.64	--	1
Naphthalene	ND		ug/kg	2.5	--	1
n-Propylbenzene	ND		ug/kg	0.64	--	1

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-04
 Client ID: 50TUFT-B102(0-1)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 09:00
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/kg	1.3	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.3	--	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.3	--	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.3	--	1
Diethyl ether	ND		ug/kg	1.3	--	1
Diisopropyl Ether	ND		ug/kg	1.3	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	1.3	--	1
Tertiary-Amyl Methyl Ether	ND		ug/kg	1.3	--	1
1,4-Dioxane	ND		ug/kg	51	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	91		70-130
Toluene-d8	90		70-130
4-Bromofluorobenzene	90		70-130
Dibromofluoromethane	93		70-130

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-05
 Client ID: 50TUFT-B102(1-3)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 09:01
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 141,8260D
 Analytical Date: 02/15/24 17:25
 Analyst: MAG
 Percent Solids: 92%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	2.9	--	1
1,1-Dichloroethane	ND		ug/kg	0.58	--	1
Chloroform	ND		ug/kg	0.88	--	1
Carbon tetrachloride	ND		ug/kg	0.58	--	1
1,2-Dichloropropane	ND		ug/kg	0.58	--	1
Dibromochloromethane	ND		ug/kg	0.58	--	1
1,1,2-Trichloroethane	ND		ug/kg	0.58	--	1
Tetrachloroethene	1.0		ug/kg	0.29	--	1
Chlorobenzene	ND		ug/kg	0.29	--	1
Trichlorofluoromethane	ND		ug/kg	2.3	--	1
1,2-Dichloroethane	ND		ug/kg	0.58	--	1
1,1,1-Trichloroethane	ND		ug/kg	0.29	--	1
Bromodichloromethane	ND		ug/kg	0.29	--	1
trans-1,3-Dichloropropene	ND		ug/kg	0.58	--	1
cis-1,3-Dichloropropene	ND		ug/kg	0.29	--	1
1,3-Dichloropropene, Total	ND		ug/kg	0.29	--	1
1,1-Dichloropropene	ND		ug/kg	0.29	--	1
Bromoform	ND		ug/kg	2.3	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.29	--	1
Benzene	ND		ug/kg	0.29	--	1
Toluene	ND		ug/kg	0.58	--	1
Ethylbenzene	ND		ug/kg	0.58	--	1
Chloromethane	ND		ug/kg	2.3	--	1
Bromomethane	ND		ug/kg	1.2	--	1
Vinyl chloride	ND		ug/kg	0.58	--	1
Chloroethane	ND		ug/kg	1.2	--	1
1,1-Dichloroethene	ND		ug/kg	0.58	--	1
trans-1,2-Dichloroethene	ND		ug/kg	0.88	--	1

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-05
 Client ID: 50TUFT-B102(1-3)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 09:01
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	0.37		ug/kg	0.29	--	1
1,2-Dichlorobenzene	ND		ug/kg	1.2	--	1
1,3-Dichlorobenzene	ND		ug/kg	1.2	--	1
1,4-Dichlorobenzene	ND		ug/kg	1.2	--	1
Methyl tert butyl ether	ND		ug/kg	1.2	--	1
p/m-Xylene	ND		ug/kg	1.2	--	1
o-Xylene	ND		ug/kg	0.58	--	1
Xylenes, Total	ND		ug/kg	0.58	--	1
cis-1,2-Dichloroethene	ND		ug/kg	0.58	--	1
1,2-Dichloroethene, Total	ND		ug/kg	0.58	--	1
Dibromomethane	ND		ug/kg	1.2	--	1
1,2,3-Trichloropropane	ND		ug/kg	1.2	--	1
Styrene	ND		ug/kg	0.58	--	1
Dichlorodifluoromethane	ND		ug/kg	5.8	--	1
Acetone	ND		ug/kg	14	--	1
Carbon disulfide	ND		ug/kg	5.8	--	1
Methyl ethyl ketone	ND		ug/kg	5.8	--	1
Methyl isobutyl ketone	ND		ug/kg	5.8	--	1
2-Hexanone	ND		ug/kg	5.8	--	1
Bromochloromethane	ND		ug/kg	1.2	--	1
Tetrahydrofuran	ND		ug/kg	2.3	--	1
2,2-Dichloropropane	ND		ug/kg	1.2	--	1
1,2-Dibromoethane	ND		ug/kg	0.58	--	1
1,3-Dichloropropane	ND		ug/kg	1.2	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.29	--	1
Bromobenzene	ND		ug/kg	1.2	--	1
n-Butylbenzene	ND		ug/kg	0.58	--	1
sec-Butylbenzene	ND		ug/kg	0.58	--	1
tert-Butylbenzene	ND		ug/kg	1.2	--	1
o-Chlorotoluene	ND		ug/kg	1.2	--	1
p-Chlorotoluene	ND		ug/kg	1.2	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	1.8	--	1
Hexachlorobutadiene	ND		ug/kg	2.3	--	1
Isopropylbenzene	ND		ug/kg	0.58	--	1
p-Isopropyltoluene	ND		ug/kg	0.58	--	1
Naphthalene	ND		ug/kg	2.3	--	1
n-Propylbenzene	ND		ug/kg	0.58	--	1



Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-05
 Client ID: 50TUFT-B102(1-3)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 09:01
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/kg	1.2	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.2	--	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.2	--	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.2	--	1
Diethyl ether	ND		ug/kg	1.2	--	1
Diisopropyl Ether	ND		ug/kg	1.2	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	1.2	--	1
Tertiary-Amyl Methyl Ether	ND		ug/kg	1.2	--	1
1,4-Dioxane	ND		ug/kg	47	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	92		70-130
Toluene-d8	90		70-130
4-Bromofluorobenzene	91		70-130
Dibromofluoromethane	93		70-130

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-06
 Client ID: 50TUFT-B103(0-1)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 09:30
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 141,8260D
 Analytical Date: 02/20/24 14:19
 Analyst: MAG
 Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	230	--	1
1,1-Dichloroethane	ND		ug/kg	46	--	1
Chloroform	ND		ug/kg	68	--	1
Carbon tetrachloride	ND		ug/kg	46	--	1
1,2-Dichloropropane	ND		ug/kg	46	--	1
Dibromochloromethane	ND		ug/kg	46	--	1
1,1,2-Trichloroethane	ND		ug/kg	46	--	1
Tetrachloroethene	92000	E	ug/kg	23	--	1
Chlorobenzene	ND		ug/kg	23	--	1
Trichlorofluoromethane	ND		ug/kg	180	--	1
1,2-Dichloroethane	ND		ug/kg	46	--	1
1,1,1-Trichloroethane	ND		ug/kg	23	--	1
Bromodichloromethane	ND		ug/kg	23	--	1
trans-1,3-Dichloropropene	ND		ug/kg	46	--	1
cis-1,3-Dichloropropene	ND		ug/kg	23	--	1
1,3-Dichloropropene, Total	ND		ug/kg	23	--	1
1,1-Dichloropropene	ND		ug/kg	23	--	1
Bromoform	ND		ug/kg	180	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	23	--	1
Benzene	ND		ug/kg	23	--	1
Toluene	ND		ug/kg	46	--	1
Ethylbenzene	ND		ug/kg	46	--	1
Chloromethane	ND		ug/kg	180	--	1
Bromomethane	ND		ug/kg	91	--	1
Vinyl chloride	ND		ug/kg	46	--	1
Chloroethane	ND		ug/kg	91	--	1
1,1-Dichloroethene	ND		ug/kg	46	--	1
trans-1,2-Dichloroethene	ND		ug/kg	68	--	1

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-06
 Client ID: 50TUFT-B103(0-1)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 09:30
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	240		ug/kg	23	--	1
1,2-Dichlorobenzene	ND		ug/kg	91	--	1
1,3-Dichlorobenzene	ND		ug/kg	91	--	1
1,4-Dichlorobenzene	ND		ug/kg	91	--	1
Methyl tert butyl ether	ND		ug/kg	91	--	1
p/m-Xylene	ND		ug/kg	91	--	1
o-Xylene	ND		ug/kg	46	--	1
Xylenes, Total	ND		ug/kg	46	--	1
cis-1,2-Dichloroethene	94		ug/kg	46	--	1
1,2-Dichloroethene, Total	94		ug/kg	46	--	1
Dibromomethane	ND		ug/kg	91	--	1
1,2,3-Trichloropropane	ND		ug/kg	91	--	1
Styrene	ND		ug/kg	46	--	1
Dichlorodifluoromethane	ND		ug/kg	460	--	1
Acetone	ND		ug/kg	460	--	1
Carbon disulfide	ND		ug/kg	460	--	1
Methyl ethyl ketone	ND		ug/kg	460	--	1
Methyl isobutyl ketone	ND		ug/kg	460	--	1
2-Hexanone	ND		ug/kg	460	--	1
Bromochloromethane	ND		ug/kg	91	--	1
Tetrahydrofuran	ND		ug/kg	180	--	1
2,2-Dichloropropane	ND		ug/kg	91	--	1
1,2-Dibromoethane	ND		ug/kg	46	--	1
1,3-Dichloropropane	ND		ug/kg	91	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	23	--	1
Bromobenzene	ND		ug/kg	91	--	1
n-Butylbenzene	ND		ug/kg	46	--	1
sec-Butylbenzene	ND		ug/kg	46	--	1
tert-Butylbenzene	ND		ug/kg	91	--	1
o-Chlorotoluene	ND		ug/kg	91	--	1
p-Chlorotoluene	ND		ug/kg	91	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	140	--	1
Hexachlorobutadiene	ND		ug/kg	180	--	1
Isopropylbenzene	ND		ug/kg	46	--	1
p-Isopropyltoluene	ND		ug/kg	46	--	1
Naphthalene	ND		ug/kg	180	--	1
n-Propylbenzene	ND		ug/kg	46	--	1

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-06
 Client ID: 50TUFT-B103(0-1)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 09:30
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 High - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/kg	91	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	91	--	1
1,3,5-Trimethylbenzene	ND		ug/kg	91	--	1
1,2,4-Trimethylbenzene	ND		ug/kg	91	--	1
Diethyl ether	ND		ug/kg	91	--	1
Diisopropyl Ether	ND		ug/kg	91	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	91	--	1
Tertiary-Amyl Methyl Ether	ND		ug/kg	91	--	1
1,4-Dioxane	ND		ug/kg	3600	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	85		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	87		70-130
Dibromofluoromethane	91		70-130

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2408101
Report Date: 02/21/24

SAMPLE RESULTS

Lab ID: L2408101-06 D
Client ID: 50TUFT-B103(0-1)
Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 09:30
Date Received: 02/14/24
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 141,8260D
Analytical Date: 02/21/24 12:25
Analyst: AJK
Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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MCP Volatile Organics by EPA 5035 High - Westborough Lab

Tetrachloroethene	100000		ug/kg	230	--	10
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	88		70-130
Toluene-d8	92		70-130
4-Bromofluorobenzene	86		70-130
Dibromofluoromethane	95		70-130

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-07
 Client ID: 50TUFT-B103(1-3)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 09:31
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 141,8260D
 Analytical Date: 02/15/24 20:26
 Analyst: MAG
 Percent Solids: 81%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	310	--	1
1,1-Dichloroethane	ND		ug/kg	61	--	1
Chloroform	ND		ug/kg	92	--	1
Carbon tetrachloride	ND		ug/kg	61	--	1
1,2-Dichloropropane	ND		ug/kg	61	--	1
Dibromochloromethane	ND		ug/kg	61	--	1
1,1,2-Trichloroethane	ND		ug/kg	61	--	1
Tetrachloroethene	2800		ug/kg	31	--	1
Chlorobenzene	ND		ug/kg	31	--	1
Trichlorofluoromethane	ND		ug/kg	240	--	1
1,2-Dichloroethane	ND		ug/kg	61	--	1
1,1,1-Trichloroethane	ND		ug/kg	31	--	1
Bromodichloromethane	ND		ug/kg	31	--	1
trans-1,3-Dichloropropene	ND		ug/kg	61	--	1
cis-1,3-Dichloropropene	ND		ug/kg	31	--	1
1,3-Dichloropropene, Total	ND		ug/kg	31	--	1
1,1-Dichloropropene	ND		ug/kg	31	--	1
Bromoform	ND		ug/kg	240	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	31	--	1
Benzene	ND		ug/kg	31	--	1
Toluene	ND		ug/kg	61	--	1
Ethylbenzene	ND		ug/kg	61	--	1
Chloromethane	ND		ug/kg	240	--	1
Bromomethane	ND		ug/kg	120	--	1
Vinyl chloride	ND		ug/kg	61	--	1
Chloroethane	ND		ug/kg	120	--	1
1,1-Dichloroethene	ND		ug/kg	61	--	1
trans-1,2-Dichloroethene	ND		ug/kg	92	--	1

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-07
 Client ID: 50TUFT-B103(1-3)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 09:31
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	ND		ug/kg	31	--	1
1,2-Dichlorobenzene	ND		ug/kg	120	--	1
1,3-Dichlorobenzene	ND		ug/kg	120	--	1
1,4-Dichlorobenzene	ND		ug/kg	120	--	1
Methyl tert butyl ether	ND		ug/kg	120	--	1
p/m-Xylene	ND		ug/kg	120	--	1
o-Xylene	ND		ug/kg	61	--	1
Xylenes, Total	ND		ug/kg	61	--	1
cis-1,2-Dichloroethene	ND		ug/kg	61	--	1
1,2-Dichloroethene, Total	ND		ug/kg	61	--	1
Dibromomethane	ND		ug/kg	120	--	1
1,2,3-Trichloropropane	ND		ug/kg	120	--	1
Styrene	ND		ug/kg	61	--	1
Dichlorodifluoromethane	ND		ug/kg	610	--	1
Acetone	ND		ug/kg	610	--	1
Carbon disulfide	ND		ug/kg	610	--	1
Methyl ethyl ketone	ND		ug/kg	610	--	1
Methyl isobutyl ketone	ND		ug/kg	610	--	1
2-Hexanone	ND		ug/kg	610	--	1
Bromochloromethane	ND		ug/kg	120	--	1
Tetrahydrofuran	ND		ug/kg	240	--	1
2,2-Dichloropropane	ND		ug/kg	120	--	1
1,2-Dibromoethane	ND		ug/kg	61	--	1
1,3-Dichloropropane	ND		ug/kg	120	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	31	--	1
Bromobenzene	ND		ug/kg	120	--	1
n-Butylbenzene	ND		ug/kg	61	--	1
sec-Butylbenzene	ND		ug/kg	61	--	1
tert-Butylbenzene	ND		ug/kg	120	--	1
o-Chlorotoluene	ND		ug/kg	120	--	1
p-Chlorotoluene	ND		ug/kg	120	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	180	--	1
Hexachlorobutadiene	ND		ug/kg	240	--	1
Isopropylbenzene	ND		ug/kg	61	--	1
p-Isopropyltoluene	ND		ug/kg	61	--	1
Naphthalene	ND		ug/kg	240	--	1
n-Propylbenzene	ND		ug/kg	61	--	1

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-07
 Client ID: 50TUFT-B103(1-3)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 09:31
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 High - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/kg	120	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	120	--	1
1,3,5-Trimethylbenzene	ND		ug/kg	120	--	1
1,2,4-Trimethylbenzene	ND		ug/kg	120	--	1
Diethyl ether	ND		ug/kg	120	--	1
Diisopropyl Ether	ND		ug/kg	120	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	120	--	1
Tertiary-Amyl Methyl Ether	ND		ug/kg	120	--	1
1,4-Dioxane	ND		ug/kg	4900	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
Toluene-d8	91		70-130
4-Bromofluorobenzene	88		70-130
Dibromofluoromethane	94		70-130

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-08
 Client ID: 50TUFT-B103(3-5)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 09:32
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 141,8260D
 Analytical Date: 02/15/24 17:55
 Analyst: MAG
 Percent Solids: 86%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	3.2	--	1
1,1-Dichloroethane	ND		ug/kg	0.63	--	1
Chloroform	ND		ug/kg	0.95	--	1
Carbon tetrachloride	ND		ug/kg	0.63	--	1
1,2-Dichloropropane	ND		ug/kg	0.63	--	1
Dibromochloromethane	ND		ug/kg	0.63	--	1
1,1,2-Trichloroethane	ND		ug/kg	0.63	--	1
Tetrachloroethene	0.52		ug/kg	0.32	--	1
Chlorobenzene	ND		ug/kg	0.32	--	1
Trichlorofluoromethane	ND		ug/kg	2.5	--	1
1,2-Dichloroethane	ND		ug/kg	0.63	--	1
1,1,1-Trichloroethane	ND		ug/kg	0.32	--	1
Bromodichloromethane	ND		ug/kg	0.32	--	1
trans-1,3-Dichloropropene	ND		ug/kg	0.63	--	1
cis-1,3-Dichloropropene	ND		ug/kg	0.32	--	1
1,3-Dichloropropene, Total	ND		ug/kg	0.32	--	1
1,1-Dichloropropene	ND		ug/kg	0.32	--	1
Bromoform	ND		ug/kg	2.5	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.32	--	1
Benzene	ND		ug/kg	0.32	--	1
Toluene	ND		ug/kg	0.63	--	1
Ethylbenzene	ND		ug/kg	0.63	--	1
Chloromethane	ND		ug/kg	2.5	--	1
Bromomethane	ND		ug/kg	1.3	--	1
Vinyl chloride	ND		ug/kg	0.63	--	1
Chloroethane	ND		ug/kg	1.3	--	1
1,1-Dichloroethene	ND		ug/kg	0.63	--	1
trans-1,2-Dichloroethene	ND		ug/kg	0.95	--	1

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-08
 Client ID: 50TUFT-B103(3-5)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 09:32
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.32	--	1
1,2-Dichlorobenzene	ND		ug/kg	1.3	--	1
1,3-Dichlorobenzene	ND		ug/kg	1.3	--	1
1,4-Dichlorobenzene	ND		ug/kg	1.3	--	1
Methyl tert butyl ether	ND		ug/kg	1.3	--	1
p/m-Xylene	ND		ug/kg	1.3	--	1
o-Xylene	ND		ug/kg	0.63	--	1
Xylenes, Total	ND		ug/kg	0.63	--	1
cis-1,2-Dichloroethene	ND		ug/kg	0.63	--	1
1,2-Dichloroethene, Total	ND		ug/kg	0.63	--	1
Dibromomethane	ND		ug/kg	1.3	--	1
1,2,3-Trichloropropane	ND		ug/kg	1.3	--	1
Styrene	ND		ug/kg	0.63	--	1
Dichlorodifluoromethane	ND		ug/kg	6.3	--	1
Acetone	ND		ug/kg	16	--	1
Carbon disulfide	ND		ug/kg	6.3	--	1
Methyl ethyl ketone	ND		ug/kg	6.3	--	1
Methyl isobutyl ketone	ND		ug/kg	6.3	--	1
2-Hexanone	ND		ug/kg	6.3	--	1
Bromochloromethane	ND		ug/kg	1.3	--	1
Tetrahydrofuran	ND		ug/kg	2.5	--	1
2,2-Dichloropropane	ND		ug/kg	1.3	--	1
1,2-Dibromoethane	ND		ug/kg	0.63	--	1
1,3-Dichloropropane	ND		ug/kg	1.3	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.32	--	1
Bromobenzene	ND		ug/kg	1.3	--	1
n-Butylbenzene	ND		ug/kg	0.63	--	1
sec-Butylbenzene	ND		ug/kg	0.63	--	1
tert-Butylbenzene	ND		ug/kg	1.3	--	1
o-Chlorotoluene	ND		ug/kg	1.3	--	1
p-Chlorotoluene	ND		ug/kg	1.3	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	1.9	--	1
Hexachlorobutadiene	ND		ug/kg	2.5	--	1
Isopropylbenzene	ND		ug/kg	0.63	--	1
p-Isopropyltoluene	ND		ug/kg	0.63	--	1
Naphthalene	ND		ug/kg	2.5	--	1
n-Propylbenzene	ND		ug/kg	0.63	--	1

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-08
 Client ID: 50TUFT-B103(3-5)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 09:32
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/kg	1.3	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.3	--	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.3	--	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.3	--	1
Diethyl ether	ND		ug/kg	1.3	--	1
Diisopropyl Ether	ND		ug/kg	1.3	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	1.3	--	1
Tertiary-Amyl Methyl Ether	ND		ug/kg	1.3	--	1
1,4-Dioxane	ND		ug/kg	50	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	91		70-130
4-Bromofluorobenzene	89		70-130
Dibromofluoromethane	95		70-130

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-09
 Client ID: 50TUFT-B104(0-1)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 10:00
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 141,8260D
 Analytical Date: 02/15/24 18:25
 Analyst: MAG
 Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	2.9	--	1
1,1-Dichloroethane	ND		ug/kg	0.57	--	1
Chloroform	ND		ug/kg	0.86	--	1
Carbon tetrachloride	ND		ug/kg	0.57	--	1
1,2-Dichloropropane	ND		ug/kg	0.57	--	1
Dibromochloromethane	ND		ug/kg	0.57	--	1
1,1,2-Trichloroethane	ND		ug/kg	0.57	--	1
Tetrachloroethene	23		ug/kg	0.29	--	1
Chlorobenzene	ND		ug/kg	0.29	--	1
Trichlorofluoromethane	ND		ug/kg	2.3	--	1
1,2-Dichloroethane	ND		ug/kg	0.57	--	1
1,1,1-Trichloroethane	ND		ug/kg	0.29	--	1
Bromodichloromethane	ND		ug/kg	0.29	--	1
trans-1,3-Dichloropropene	ND		ug/kg	0.57	--	1
cis-1,3-Dichloropropene	ND		ug/kg	0.29	--	1
1,3-Dichloropropene, Total	ND		ug/kg	0.29	--	1
1,1-Dichloropropene	ND		ug/kg	0.29	--	1
Bromoform	ND		ug/kg	2.3	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.29	--	1
Benzene	ND		ug/kg	0.29	--	1
Toluene	ND		ug/kg	0.57	--	1
Ethylbenzene	ND		ug/kg	0.57	--	1
Chloromethane	ND		ug/kg	2.3	--	1
Bromomethane	ND		ug/kg	1.1	--	1
Vinyl chloride	ND		ug/kg	0.57	--	1
Chloroethane	ND		ug/kg	1.1	--	1
1,1-Dichloroethene	ND		ug/kg	0.57	--	1
trans-1,2-Dichloroethene	ND		ug/kg	0.86	--	1

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-09
 Client ID: 50TUFT-B104(0-1)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 10:00
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.29	--	1
1,2-Dichlorobenzene	ND		ug/kg	1.1	--	1
1,3-Dichlorobenzene	ND		ug/kg	1.1	--	1
1,4-Dichlorobenzene	ND		ug/kg	1.1	--	1
Methyl tert butyl ether	ND		ug/kg	1.1	--	1
p/m-Xylene	ND		ug/kg	1.1	--	1
o-Xylene	ND		ug/kg	0.57	--	1
Xylenes, Total	ND		ug/kg	0.57	--	1
cis-1,2-Dichloroethene	ND		ug/kg	0.57	--	1
1,2-Dichloroethene, Total	ND		ug/kg	0.57	--	1
Dibromomethane	ND		ug/kg	1.1	--	1
1,2,3-Trichloropropane	ND		ug/kg	1.1	--	1
Styrene	ND		ug/kg	0.57	--	1
Dichlorodifluoromethane	ND		ug/kg	5.7	--	1
Acetone	ND		ug/kg	14	--	1
Carbon disulfide	ND		ug/kg	5.7	--	1
Methyl ethyl ketone	ND		ug/kg	5.7	--	1
Methyl isobutyl ketone	ND		ug/kg	5.7	--	1
2-Hexanone	ND		ug/kg	5.7	--	1
Bromochloromethane	ND		ug/kg	1.1	--	1
Tetrahydrofuran	ND		ug/kg	2.3	--	1
2,2-Dichloropropane	ND		ug/kg	1.1	--	1
1,2-Dibromoethane	ND		ug/kg	0.57	--	1
1,3-Dichloropropane	ND		ug/kg	1.1	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.29	--	1
Bromobenzene	ND		ug/kg	1.1	--	1
n-Butylbenzene	ND		ug/kg	0.57	--	1
sec-Butylbenzene	ND		ug/kg	0.57	--	1
tert-Butylbenzene	ND		ug/kg	1.1	--	1
o-Chlorotoluene	ND		ug/kg	1.1	--	1
p-Chlorotoluene	ND		ug/kg	1.1	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	1.7	--	1
Hexachlorobutadiene	ND		ug/kg	2.3	--	1
Isopropylbenzene	ND		ug/kg	0.57	--	1
p-Isopropyltoluene	ND		ug/kg	0.57	--	1
Naphthalene	ND		ug/kg	2.3	--	1
n-Propylbenzene	ND		ug/kg	0.57	--	1

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-09
 Client ID: 50TUFT-B104(0-1)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 10:00
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/kg	1.1	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.1	--	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.1	--	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.1	--	1
Diethyl ether	ND		ug/kg	1.1	--	1
Diisopropyl Ether	ND		ug/kg	1.1	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	1.1	--	1
Tertiary-Amyl Methyl Ether	ND		ug/kg	1.1	--	1
1,4-Dioxane	ND		ug/kg	46	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	92		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	99		70-130

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-10
 Client ID: 50TUFT-B104(1-3)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 10:01
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 141,8260D
 Analytical Date: 02/15/24 18:56
 Analyst: MAG
 Percent Solids: 80%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	3.3	--	1
1,1-Dichloroethane	ND		ug/kg	0.67	--	1
Chloroform	ND		ug/kg	1.0	--	1
Carbon tetrachloride	ND		ug/kg	0.67	--	1
1,2-Dichloropropane	ND		ug/kg	0.67	--	1
Dibromochloromethane	ND		ug/kg	0.67	--	1
1,1,2-Trichloroethane	ND		ug/kg	0.67	--	1
Tetrachloroethene	15		ug/kg	0.33	--	1
Chlorobenzene	ND		ug/kg	0.33	--	1
Trichlorofluoromethane	ND		ug/kg	2.7	--	1
1,2-Dichloroethane	ND		ug/kg	0.67	--	1
1,1,1-Trichloroethane	ND		ug/kg	0.33	--	1
Bromodichloromethane	ND		ug/kg	0.33	--	1
trans-1,3-Dichloropropene	ND		ug/kg	0.67	--	1
cis-1,3-Dichloropropene	ND		ug/kg	0.33	--	1
1,3-Dichloropropene, Total	ND		ug/kg	0.33	--	1
1,1-Dichloropropene	ND		ug/kg	0.33	--	1
Bromoform	ND		ug/kg	2.7	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.33	--	1
Benzene	ND		ug/kg	0.33	--	1
Toluene	ND		ug/kg	0.67	--	1
Ethylbenzene	ND		ug/kg	0.67	--	1
Chloromethane	ND		ug/kg	2.7	--	1
Bromomethane	ND		ug/kg	1.3	--	1
Vinyl chloride	ND		ug/kg	0.67	--	1
Chloroethane	ND		ug/kg	1.3	--	1
1,1-Dichloroethene	ND		ug/kg	0.67	--	1
trans-1,2-Dichloroethene	ND		ug/kg	1.0	--	1

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-10
 Client ID: 50TUFT-B104(1-3)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 10:01
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.33	--	1
1,2-Dichlorobenzene	ND		ug/kg	1.3	--	1
1,3-Dichlorobenzene	ND		ug/kg	1.3	--	1
1,4-Dichlorobenzene	ND		ug/kg	1.3	--	1
Methyl tert butyl ether	ND		ug/kg	1.3	--	1
p/m-Xylene	ND		ug/kg	1.3	--	1
o-Xylene	ND		ug/kg	0.67	--	1
Xylenes, Total	ND		ug/kg	0.67	--	1
cis-1,2-Dichloroethene	ND		ug/kg	0.67	--	1
1,2-Dichloroethene, Total	ND		ug/kg	0.67	--	1
Dibromomethane	ND		ug/kg	1.3	--	1
1,2,3-Trichloropropane	ND		ug/kg	1.3	--	1
Styrene	ND		ug/kg	0.67	--	1
Dichlorodifluoromethane	ND		ug/kg	6.7	--	1
Acetone	ND		ug/kg	17	--	1
Carbon disulfide	ND		ug/kg	6.7	--	1
Methyl ethyl ketone	ND		ug/kg	6.7	--	1
Methyl isobutyl ketone	ND		ug/kg	6.7	--	1
2-Hexanone	ND		ug/kg	6.7	--	1
Bromochloromethane	ND		ug/kg	1.3	--	1
Tetrahydrofuran	ND		ug/kg	2.7	--	1
2,2-Dichloropropane	ND		ug/kg	1.3	--	1
1,2-Dibromoethane	ND		ug/kg	0.67	--	1
1,3-Dichloropropane	ND		ug/kg	1.3	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.33	--	1
Bromobenzene	ND		ug/kg	1.3	--	1
n-Butylbenzene	ND		ug/kg	0.67	--	1
sec-Butylbenzene	ND		ug/kg	0.67	--	1
tert-Butylbenzene	ND		ug/kg	1.3	--	1
o-Chlorotoluene	ND		ug/kg	1.3	--	1
p-Chlorotoluene	ND		ug/kg	1.3	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.0	--	1
Hexachlorobutadiene	ND		ug/kg	2.7	--	1
Isopropylbenzene	ND		ug/kg	0.67	--	1
p-Isopropyltoluene	ND		ug/kg	0.67	--	1
Naphthalene	ND		ug/kg	2.7	--	1
n-Propylbenzene	ND		ug/kg	0.67	--	1

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2408101
Report Date: 02/21/24

SAMPLE RESULTS

Lab ID: L2408101-10
Client ID: 50TUFT-B104(1-3)
Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 10:01
Date Received: 02/14/24
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/kg	1.3	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.3	--	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.3	--	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.3	--	1
Diethyl ether	ND		ug/kg	1.3	--	1
Diisopropyl Ether	ND		ug/kg	1.3	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	1.3	--	1
Tertiary-Amyl Methyl Ether	ND		ug/kg	1.3	--	1
1,4-Dioxane	ND		ug/kg	53	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	97		70-130

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-11
 Client ID: 50TUFT-B104(3-5)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 10:02
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 141,8260D
 Analytical Date: 02/15/24 19:26
 Analyst: MAG
 Percent Solids: 82%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.4	--	1
1,1-Dichloroethane	ND		ug/kg	0.88	--	1
Chloroform	ND		ug/kg	1.3	--	1
Carbon tetrachloride	ND		ug/kg	0.88	--	1
1,2-Dichloropropane	ND		ug/kg	0.88	--	1
Dibromochloromethane	ND		ug/kg	0.88	--	1
1,1,2-Trichloroethane	ND		ug/kg	0.88	--	1
Tetrachloroethene	2.4		ug/kg	0.44	--	1
Chlorobenzene	ND		ug/kg	0.44	--	1
Trichlorofluoromethane	ND		ug/kg	3.5	--	1
1,2-Dichloroethane	ND		ug/kg	0.88	--	1
1,1,1-Trichloroethane	ND		ug/kg	0.44	--	1
Bromodichloromethane	ND		ug/kg	0.44	--	1
trans-1,3-Dichloropropene	ND		ug/kg	0.88	--	1
cis-1,3-Dichloropropene	ND		ug/kg	0.44	--	1
1,3-Dichloropropene, Total	ND		ug/kg	0.44	--	1
1,1-Dichloropropene	ND		ug/kg	0.44	--	1
Bromoform	ND		ug/kg	3.5	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.44	--	1
Benzene	ND		ug/kg	0.44	--	1
Toluene	ND		ug/kg	0.88	--	1
Ethylbenzene	ND		ug/kg	0.88	--	1
Chloromethane	ND		ug/kg	3.5	--	1
Bromomethane	ND		ug/kg	1.8	--	1
Vinyl chloride	ND		ug/kg	0.88	--	1
Chloroethane	ND		ug/kg	1.8	--	1
1,1-Dichloroethene	ND		ug/kg	0.88	--	1
trans-1,2-Dichloroethene	ND		ug/kg	1.3	--	1

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-11
 Client ID: 50TUFT-B104(3-5)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 10:02
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.44	--	1
1,2-Dichlorobenzene	ND		ug/kg	1.8	--	1
1,3-Dichlorobenzene	ND		ug/kg	1.8	--	1
1,4-Dichlorobenzene	ND		ug/kg	1.8	--	1
Methyl tert butyl ether	ND		ug/kg	1.8	--	1
p/m-Xylene	ND		ug/kg	1.8	--	1
o-Xylene	ND		ug/kg	0.88	--	1
Xylenes, Total	ND		ug/kg	0.88	--	1
cis-1,2-Dichloroethene	ND		ug/kg	0.88	--	1
1,2-Dichloroethene, Total	ND		ug/kg	0.88	--	1
Dibromomethane	ND		ug/kg	1.8	--	1
1,2,3-Trichloropropane	ND		ug/kg	1.8	--	1
Styrene	ND		ug/kg	0.88	--	1
Dichlorodifluoromethane	ND		ug/kg	8.8	--	1
Acetone	ND		ug/kg	22	--	1
Carbon disulfide	ND		ug/kg	8.8	--	1
Methyl ethyl ketone	ND		ug/kg	8.8	--	1
Methyl isobutyl ketone	ND		ug/kg	8.8	--	1
2-Hexanone	ND		ug/kg	8.8	--	1
Bromochloromethane	ND		ug/kg	1.8	--	1
Tetrahydrofuran	ND		ug/kg	3.5	--	1
2,2-Dichloropropane	ND		ug/kg	1.8	--	1
1,2-Dibromoethane	ND		ug/kg	0.88	--	1
1,3-Dichloropropane	ND		ug/kg	1.8	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.44	--	1
Bromobenzene	ND		ug/kg	1.8	--	1
n-Butylbenzene	ND		ug/kg	0.88	--	1
sec-Butylbenzene	ND		ug/kg	0.88	--	1
tert-Butylbenzene	ND		ug/kg	1.8	--	1
o-Chlorotoluene	ND		ug/kg	1.8	--	1
p-Chlorotoluene	ND		ug/kg	1.8	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.6	--	1
Hexachlorobutadiene	ND		ug/kg	3.5	--	1
Isopropylbenzene	ND		ug/kg	0.88	--	1
p-Isopropyltoluene	ND		ug/kg	0.88	--	1
Naphthalene	ND		ug/kg	3.5	--	1
n-Propylbenzene	ND		ug/kg	0.88	--	1

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-11
 Client ID: 50TUFT-B104(3-5)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 10:02
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/kg	1.8	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.8	--	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.8	--	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.8	--	1
Diethyl ether	ND		ug/kg	1.8	--	1
Diisopropyl Ether	ND		ug/kg	1.8	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	1.8	--	1
Tertiary-Amyl Methyl Ether	ND		ug/kg	1.8	--	1
1,4-Dioxane	ND		ug/kg	70	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
Toluene-d8	90		70-130
4-Bromofluorobenzene	89		70-130
Dibromofluoromethane	95		70-130

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-12
 Client ID: 50TUFT-B105(0-1)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 11:00
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 141,8260D
 Analytical Date: 02/15/24 20:57
 Analyst: MAG
 Percent Solids: 92%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	220	--	1
1,1-Dichloroethane	ND		ug/kg	44	--	1
Chloroform	ND		ug/kg	67	--	1
Carbon tetrachloride	ND		ug/kg	44	--	1
1,2-Dichloropropane	ND		ug/kg	44	--	1
Dibromochloromethane	ND		ug/kg	44	--	1
1,1,2-Trichloroethane	ND		ug/kg	44	--	1
Tetrachloroethene	810		ug/kg	22	--	1
Chlorobenzene	ND		ug/kg	22	--	1
Trichlorofluoromethane	ND		ug/kg	180	--	1
1,2-Dichloroethane	ND		ug/kg	44	--	1
1,1,1-Trichloroethane	ND		ug/kg	22	--	1
Bromodichloromethane	ND		ug/kg	22	--	1
trans-1,3-Dichloropropene	ND		ug/kg	44	--	1
cis-1,3-Dichloropropene	ND		ug/kg	22	--	1
1,3-Dichloropropene, Total	ND		ug/kg	22	--	1
1,1-Dichloropropene	ND		ug/kg	22	--	1
Bromoform	ND		ug/kg	180	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	22	--	1
Benzene	ND		ug/kg	22	--	1
Toluene	53		ug/kg	44	--	1
Ethylbenzene	ND		ug/kg	44	--	1
Chloromethane	ND		ug/kg	180	--	1
Bromomethane	ND		ug/kg	89	--	1
Vinyl chloride	ND		ug/kg	44	--	1
Chloroethane	ND		ug/kg	89	--	1
1,1-Dichloroethene	ND		ug/kg	44	--	1
trans-1,2-Dichloroethene	ND		ug/kg	67	--	1

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-12
 Client ID: 50TUFT-B105(0-1)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 11:00
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	ND		ug/kg	22	--	1
1,2-Dichlorobenzene	ND		ug/kg	89	--	1
1,3-Dichlorobenzene	ND		ug/kg	89	--	1
1,4-Dichlorobenzene	ND		ug/kg	89	--	1
Methyl tert butyl ether	ND		ug/kg	89	--	1
p/m-Xylene	ND		ug/kg	89	--	1
o-Xylene	ND		ug/kg	44	--	1
Xylenes, Total	ND		ug/kg	44	--	1
cis-1,2-Dichloroethene	ND		ug/kg	44	--	1
1,2-Dichloroethene, Total	ND		ug/kg	44	--	1
Dibromomethane	ND		ug/kg	89	--	1
1,2,3-Trichloropropane	ND		ug/kg	89	--	1
Styrene	ND		ug/kg	44	--	1
Dichlorodifluoromethane	ND		ug/kg	440	--	1
Acetone	ND		ug/kg	440	--	1
Carbon disulfide	ND		ug/kg	440	--	1
Methyl ethyl ketone	ND		ug/kg	440	--	1
Methyl isobutyl ketone	ND		ug/kg	440	--	1
2-Hexanone	ND		ug/kg	440	--	1
Bromochloromethane	ND		ug/kg	89	--	1
Tetrahydrofuran	ND		ug/kg	180	--	1
2,2-Dichloropropane	ND		ug/kg	89	--	1
1,2-Dibromoethane	ND		ug/kg	44	--	1
1,3-Dichloropropane	ND		ug/kg	89	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	22	--	1
Bromobenzene	ND		ug/kg	89	--	1
n-Butylbenzene	ND		ug/kg	44	--	1
sec-Butylbenzene	ND		ug/kg	44	--	1
tert-Butylbenzene	ND		ug/kg	89	--	1
o-Chlorotoluene	ND		ug/kg	89	--	1
p-Chlorotoluene	ND		ug/kg	89	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	130	--	1
Hexachlorobutadiene	ND		ug/kg	180	--	1
Isopropylbenzene	ND		ug/kg	44	--	1
p-Isopropyltoluene	ND		ug/kg	44	--	1
Naphthalene	ND		ug/kg	180	--	1
n-Propylbenzene	ND		ug/kg	44	--	1

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2408101
Report Date: 02/21/24

SAMPLE RESULTS

Lab ID: L2408101-12
Client ID: 50TUFT-B105(0-1)
Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 11:00
Date Received: 02/14/24
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 High - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/kg	89	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	89	--	1
1,3,5-Trimethylbenzene	ND		ug/kg	89	--	1
1,2,4-Trimethylbenzene	ND		ug/kg	89	--	1
Diethyl ether	ND		ug/kg	89	--	1
Diisopropyl Ether	ND		ug/kg	89	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	89	--	1
Tertiary-Amyl Methyl Ether	ND		ug/kg	89	--	1
1,4-Dioxane	ND		ug/kg	3600	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
Toluene-d8	90		70-130
4-Bromofluorobenzene	87		70-130
Dibromofluoromethane	94		70-130

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-13
 Client ID: 50TUFT-B105(1-3)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 11:01
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 141,8260D
 Analytical Date: 02/15/24 19:56
 Analyst: MAG
 Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	6.1	--	1
1,1-Dichloroethane	ND		ug/kg	1.2	--	1
Chloroform	ND		ug/kg	1.8	--	1
Carbon tetrachloride	ND		ug/kg	1.2	--	1
1,2-Dichloropropane	ND		ug/kg	1.2	--	1
Dibromochloromethane	ND		ug/kg	1.2	--	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	--	1
Tetrachloroethene	10		ug/kg	0.61	--	1
Chlorobenzene	ND		ug/kg	0.61	--	1
Trichlorofluoromethane	ND		ug/kg	4.8	--	1
1,2-Dichloroethane	ND		ug/kg	1.2	--	1
1,1,1-Trichloroethane	ND		ug/kg	0.61	--	1
Bromodichloromethane	ND		ug/kg	0.61	--	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	--	1
cis-1,3-Dichloropropene	ND		ug/kg	0.61	--	1
1,3-Dichloropropene, Total	ND		ug/kg	0.61	--	1
1,1-Dichloropropene	ND		ug/kg	0.61	--	1
Bromoform	ND		ug/kg	4.8	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.61	--	1
Benzene	ND		ug/kg	0.61	--	1
Toluene	ND		ug/kg	1.2	--	1
Ethylbenzene	ND		ug/kg	1.2	--	1
Chloromethane	ND		ug/kg	4.8	--	1
Bromomethane	ND		ug/kg	2.4	--	1
Vinyl chloride	ND		ug/kg	1.2	--	1
Chloroethane	ND		ug/kg	2.4	--	1
1,1-Dichloroethene	ND		ug/kg	1.2	--	1
trans-1,2-Dichloroethene	ND		ug/kg	1.8	--	1

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-13
 Client ID: 50TUFT-B105(1-3)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 11:01
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.61	--	1
1,2-Dichlorobenzene	ND		ug/kg	2.4	--	1
1,3-Dichlorobenzene	ND		ug/kg	2.4	--	1
1,4-Dichlorobenzene	ND		ug/kg	2.4	--	1
Methyl tert butyl ether	ND		ug/kg	2.4	--	1
p/m-Xylene	ND		ug/kg	2.4	--	1
o-Xylene	ND		ug/kg	1.2	--	1
Xylenes, Total	ND		ug/kg	1.2	--	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	--	1
1,2-Dichloroethene, Total	ND		ug/kg	1.2	--	1
Dibromomethane	ND		ug/kg	2.4	--	1
1,2,3-Trichloropropane	ND		ug/kg	2.4	--	1
Styrene	ND		ug/kg	1.2	--	1
Dichlorodifluoromethane	ND		ug/kg	12	--	1
Acetone	ND		ug/kg	30	--	1
Carbon disulfide	ND		ug/kg	12	--	1
Methyl ethyl ketone	ND		ug/kg	12	--	1
Methyl isobutyl ketone	ND		ug/kg	12	--	1
2-Hexanone	ND		ug/kg	12	--	1
Bromochloromethane	ND		ug/kg	2.4	--	1
Tetrahydrofuran	ND		ug/kg	4.8	--	1
2,2-Dichloropropane	ND		ug/kg	2.4	--	1
1,2-Dibromoethane	ND		ug/kg	1.2	--	1
1,3-Dichloropropane	ND		ug/kg	2.4	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.61	--	1
Bromobenzene	ND		ug/kg	2.4	--	1
n-Butylbenzene	ND		ug/kg	1.2	--	1
sec-Butylbenzene	ND		ug/kg	1.2	--	1
tert-Butylbenzene	ND		ug/kg	2.4	--	1
o-Chlorotoluene	ND		ug/kg	2.4	--	1
p-Chlorotoluene	ND		ug/kg	2.4	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.6	--	1
Hexachlorobutadiene	ND		ug/kg	4.8	--	1
Isopropylbenzene	ND		ug/kg	1.2	--	1
p-Isopropyltoluene	ND		ug/kg	1.2	--	1
Naphthalene	ND		ug/kg	4.8	--	1
n-Propylbenzene	ND		ug/kg	1.2	--	1

Project Name: TUFTS STREET**Lab Number:** L2408101**Project Number:** 045163**Report Date:** 02/21/24**SAMPLE RESULTS**

Lab ID: L2408101-13
 Client ID: 50TUFT-B105(1-3)
 Sample Location: SOMERVILLE, MA

Date Collected: 02/12/24 11:01
 Date Received: 02/14/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by EPA 5035 Low - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/kg	2.4	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.4	--	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.4	--	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.4	--	1
Diethyl ether	ND		ug/kg	2.4	--	1
Diisopropyl Ether	ND		ug/kg	2.4	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	2.4	--	1
Tertiary-Amyl Methyl Ether	ND		ug/kg	2.4	--	1
1,4-Dioxane	ND		ug/kg	97	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	90		70-130
4-Bromofluorobenzene	88		70-130
Dibromofluoromethane	96		70-130

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2408101
Report Date: 02/21/24

Method Blank Analysis Batch Quality Control

Analytical Method: 141,8260D
 Analytical Date: 02/15/24 13:52
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 07,12 Batch: WG1886042-5					
Methylene chloride	ND		ug/kg	250	--
1,1-Dichloroethane	ND		ug/kg	50	--
Chloroform	ND		ug/kg	75	--
Carbon tetrachloride	ND		ug/kg	50	--
1,2-Dichloropropane	ND		ug/kg	50	--
Dibromochloromethane	ND		ug/kg	50	--
1,1,2-Trichloroethane	ND		ug/kg	50	--
Tetrachloroethene	ND		ug/kg	25	--
Chlorobenzene	ND		ug/kg	25	--
Trichlorofluoromethane	ND		ug/kg	200	--
1,2-Dichloroethane	ND		ug/kg	50	--
1,1,1-Trichloroethane	ND		ug/kg	25	--
Bromodichloromethane	ND		ug/kg	25	--
trans-1,3-Dichloropropene	ND		ug/kg	50	--
cis-1,3-Dichloropropene	ND		ug/kg	25	--
1,3-Dichloropropene, Total	ND		ug/kg	25	--
1,1-Dichloropropene	ND		ug/kg	25	--
Bromoform	ND		ug/kg	200	--
1,1,2,2-Tetrachloroethane	ND		ug/kg	25	--
Benzene	ND		ug/kg	25	--
Toluene	ND		ug/kg	50	--
Ethylbenzene	ND		ug/kg	50	--
Chloromethane	ND		ug/kg	200	--
Bromomethane	ND		ug/kg	100	--
Vinyl chloride	ND		ug/kg	50	--
Chloroethane	ND		ug/kg	100	--
1,1-Dichloroethene	ND		ug/kg	50	--
trans-1,2-Dichloroethene	ND		ug/kg	75	--
Trichloroethene	ND		ug/kg	25	--

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2408101
Report Date: 02/21/24

Method Blank Analysis Batch Quality Control

Analytical Method: 141,8260D
 Analytical Date: 02/15/24 13:52
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 07,12 Batch: WG1886042-5					
1,2-Dichlorobenzene	ND		ug/kg	100	--
1,3-Dichlorobenzene	ND		ug/kg	100	--
1,4-Dichlorobenzene	ND		ug/kg	100	--
Methyl tert butyl ether	ND		ug/kg	100	--
p/m-Xylene	ND		ug/kg	100	--
o-Xylene	ND		ug/kg	50	--
Xylenes, Total	ND		ug/kg	50	--
cis-1,2-Dichloroethene	ND		ug/kg	50	--
1,2-Dichloroethene, Total	ND		ug/kg	50	--
Dibromomethane	ND		ug/kg	100	--
1,2,3-Trichloropropane	ND		ug/kg	100	--
Styrene	ND		ug/kg	50	--
Dichlorodifluoromethane	ND		ug/kg	500	--
Acetone	ND		ug/kg	500	--
Carbon disulfide	ND		ug/kg	500	--
Methyl ethyl ketone	ND		ug/kg	500	--
Methyl isobutyl ketone	ND		ug/kg	500	--
2-Hexanone	ND		ug/kg	500	--
Bromochloromethane	ND		ug/kg	100	--
Tetrahydrofuran	ND		ug/kg	200	--
2,2-Dichloropropane	ND		ug/kg	100	--
1,2-Dibromoethane	ND		ug/kg	50	--
1,3-Dichloropropane	ND		ug/kg	100	--
1,1,1,2-Tetrachloroethane	ND		ug/kg	25	--
Bromobenzene	ND		ug/kg	100	--
n-Butylbenzene	ND		ug/kg	50	--
sec-Butylbenzene	ND		ug/kg	50	--
tert-Butylbenzene	ND		ug/kg	100	--
o-Chlorotoluene	ND		ug/kg	100	--

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2408101
Report Date: 02/21/24

Method Blank Analysis Batch Quality Control

Analytical Method: 141,8260D
Analytical Date: 02/15/24 13:52
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 07,12 Batch: WG1886042-5					
p-Chlorotoluene	ND		ug/kg	100	--
1,2-Dibromo-3-chloropropane	ND		ug/kg	150	--
Hexachlorobutadiene	ND		ug/kg	200	--
Isopropylbenzene	ND		ug/kg	50	--
p-Isopropyltoluene	ND		ug/kg	50	--
Naphthalene	ND		ug/kg	200	--
n-Propylbenzene	ND		ug/kg	50	--
1,2,3-Trichlorobenzene	ND		ug/kg	100	--
1,2,4-Trichlorobenzene	ND		ug/kg	100	--
1,3,5-Trimethylbenzene	ND		ug/kg	100	--
1,2,4-Trimethylbenzene	ND		ug/kg	100	--
Diethyl ether	ND		ug/kg	100	--
Diisopropyl Ether	ND		ug/kg	100	--
Ethyl-Tert-Butyl-Ether	ND		ug/kg	100	--
Tertiary-Amyl Methyl Ether	ND		ug/kg	100	--
1,4-Dioxane	ND		ug/kg	4000	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	90		70-130
Toluene-d8	91		70-130
4-Bromofluorobenzene	91		70-130
Dibromofluoromethane	92		70-130

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2408101
Report Date: 02/21/24

Method Blank Analysis Batch Quality Control

Analytical Method: 141,8260D
 Analytical Date: 02/15/24 13:52
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-05,08-11,13 Batch: WG1886062-5					
Methylene chloride	ND		ug/kg	5.0	--
1,1-Dichloroethane	ND		ug/kg	1.0	--
Chloroform	ND		ug/kg	1.5	--
Carbon tetrachloride	ND		ug/kg	1.0	--
1,2-Dichloropropane	ND		ug/kg	1.0	--
Dibromochloromethane	ND		ug/kg	1.0	--
1,1,2-Trichloroethane	ND		ug/kg	1.0	--
Tetrachloroethene	ND		ug/kg	0.50	--
Chlorobenzene	ND		ug/kg	0.50	--
Trichlorofluoromethane	ND		ug/kg	4.0	--
1,2-Dichloroethane	ND		ug/kg	1.0	--
1,1,1-Trichloroethane	ND		ug/kg	0.50	--
Bromodichloromethane	ND		ug/kg	0.50	--
trans-1,3-Dichloropropene	ND		ug/kg	1.0	--
cis-1,3-Dichloropropene	ND		ug/kg	0.50	--
1,3-Dichloropropene, Total	ND		ug/kg	0.50	--
1,1-Dichloropropene	ND		ug/kg	0.50	--
Bromoform	ND		ug/kg	4.0	--
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	--
Benzene	ND		ug/kg	0.50	--
Toluene	ND		ug/kg	1.0	--
Ethylbenzene	ND		ug/kg	1.0	--
Chloromethane	ND		ug/kg	4.0	--
Bromomethane	ND		ug/kg	2.0	--
Vinyl chloride	ND		ug/kg	1.0	--
Chloroethane	ND		ug/kg	2.0	--
1,1-Dichloroethene	ND		ug/kg	1.0	--
trans-1,2-Dichloroethene	ND		ug/kg	1.5	--
Trichloroethene	ND		ug/kg	0.50	--

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2408101
Report Date: 02/21/24

Method Blank Analysis Batch Quality Control

Analytical Method: 141,8260D
 Analytical Date: 02/15/24 13:52
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-05,08-11,13 Batch: WG1886062-5					
1,2-Dichlorobenzene	ND		ug/kg	2.0	--
1,3-Dichlorobenzene	ND		ug/kg	2.0	--
1,4-Dichlorobenzene	ND		ug/kg	2.0	--
Methyl tert butyl ether	ND		ug/kg	2.0	--
p/m-Xylene	ND		ug/kg	2.0	--
o-Xylene	ND		ug/kg	1.0	--
Xylenes, Total	ND		ug/kg	1.0	--
cis-1,2-Dichloroethene	ND		ug/kg	1.0	--
1,2-Dichloroethene, Total	ND		ug/kg	1.0	--
Dibromomethane	ND		ug/kg	2.0	--
1,2,3-Trichloropropane	ND		ug/kg	2.0	--
Styrene	ND		ug/kg	1.0	--
Dichlorodifluoromethane	ND		ug/kg	10	--
Acetone	ND		ug/kg	25	--
Carbon disulfide	ND		ug/kg	10	--
Methyl ethyl ketone	ND		ug/kg	10	--
Methyl isobutyl ketone	ND		ug/kg	10	--
2-Hexanone	ND		ug/kg	10	--
Bromochloromethane	ND		ug/kg	2.0	--
Tetrahydrofuran	ND		ug/kg	4.0	--
2,2-Dichloropropane	ND		ug/kg	2.0	--
1,2-Dibromoethane	ND		ug/kg	1.0	--
1,3-Dichloropropane	ND		ug/kg	2.0	--
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	--
Bromobenzene	ND		ug/kg	2.0	--
n-Butylbenzene	ND		ug/kg	1.0	--
sec-Butylbenzene	ND		ug/kg	1.0	--
tert-Butylbenzene	ND		ug/kg	2.0	--
o-Chlorotoluene	ND		ug/kg	2.0	--

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2408101
Report Date: 02/21/24

Method Blank Analysis Batch Quality Control

Analytical Method: 141,8260D
Analytical Date: 02/15/24 13:52
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-05,08-11,13 Batch: WG1886062-5					
p-Chlorotoluene	ND		ug/kg	2.0	--
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	--
Hexachlorobutadiene	ND		ug/kg	4.0	--
Isopropylbenzene	ND		ug/kg	1.0	--
p-Isopropyltoluene	ND		ug/kg	1.0	--
Naphthalene	ND		ug/kg	4.0	--
n-Propylbenzene	ND		ug/kg	1.0	--
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	--
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	--
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	--
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	--
Diethyl ether	ND		ug/kg	2.0	--
Diisopropyl Ether	ND		ug/kg	2.0	--
Ethyl-Tert-Butyl-Ether	ND		ug/kg	2.0	--
Tertiary-Amyl Methyl Ether	ND		ug/kg	2.0	--
1,4-Dioxane	ND		ug/kg	80	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	90		70-130
Toluene-d8	91		70-130
4-Bromofluorobenzene	91		70-130
Dibromofluoromethane	92		70-130

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2408101
Report Date: 02/21/24

Method Blank Analysis Batch Quality Control

Analytical Method: 141,8260D
 Analytical Date: 02/20/24 10:26
 Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 06 Batch: WG1887347-5					
Methylene chloride	ND		ug/kg	250	--
1,1-Dichloroethane	ND		ug/kg	50	--
Chloroform	76		ug/kg	75	--
Carbon tetrachloride	ND		ug/kg	50	--
1,2-Dichloropropane	ND		ug/kg	50	--
Dibromochloromethane	ND		ug/kg	50	--
1,1,2-Trichloroethane	ND		ug/kg	50	--
Tetrachloroethene	ND		ug/kg	25	--
Chlorobenzene	ND		ug/kg	25	--
Trichlorofluoromethane	ND		ug/kg	200	--
1,2-Dichloroethane	ND		ug/kg	50	--
1,1,1-Trichloroethane	ND		ug/kg	25	--
Bromodichloromethane	ND		ug/kg	25	--
trans-1,3-Dichloropropene	ND		ug/kg	50	--
cis-1,3-Dichloropropene	ND		ug/kg	25	--
1,3-Dichloropropene, Total	ND		ug/kg	25	--
1,1-Dichloropropene	ND		ug/kg	25	--
Bromoform	ND		ug/kg	200	--
1,1,2,2-Tetrachloroethane	ND		ug/kg	25	--
Benzene	ND		ug/kg	25	--
Toluene	ND		ug/kg	50	--
Ethylbenzene	ND		ug/kg	50	--
Chloromethane	ND		ug/kg	200	--
Bromomethane	ND		ug/kg	100	--
Vinyl chloride	ND		ug/kg	50	--
Chloroethane	ND		ug/kg	100	--
1,1-Dichloroethene	ND		ug/kg	50	--
trans-1,2-Dichloroethene	ND		ug/kg	75	--
Trichloroethene	ND		ug/kg	25	--

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2408101
Report Date: 02/21/24

Method Blank Analysis Batch Quality Control

Analytical Method: 141,8260D
 Analytical Date: 02/20/24 10:26
 Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 06 Batch: WG1887347-5					
1,2-Dichlorobenzene	ND		ug/kg	100	--
1,3-Dichlorobenzene	ND		ug/kg	100	--
1,4-Dichlorobenzene	ND		ug/kg	100	--
Methyl tert butyl ether	ND		ug/kg	100	--
p/m-Xylene	ND		ug/kg	100	--
o-Xylene	ND		ug/kg	50	--
Xylenes, Total	ND		ug/kg	50	--
cis-1,2-Dichloroethene	ND		ug/kg	50	--
1,2-Dichloroethene, Total	ND		ug/kg	50	--
Dibromomethane	ND		ug/kg	100	--
1,2,3-Trichloropropane	ND		ug/kg	100	--
Styrene	ND		ug/kg	50	--
Dichlorodifluoromethane	ND		ug/kg	500	--
Acetone	ND		ug/kg	500	--
Carbon disulfide	ND		ug/kg	500	--
Methyl ethyl ketone	ND		ug/kg	500	--
Methyl isobutyl ketone	ND		ug/kg	500	--
2-Hexanone	ND		ug/kg	500	--
Bromochloromethane	ND		ug/kg	100	--
Tetrahydrofuran	ND		ug/kg	200	--
2,2-Dichloropropane	ND		ug/kg	100	--
1,2-Dibromoethane	ND		ug/kg	50	--
1,3-Dichloropropane	ND		ug/kg	100	--
1,1,1,2-Tetrachloroethane	ND		ug/kg	25	--
Bromobenzene	ND		ug/kg	100	--
n-Butylbenzene	ND		ug/kg	50	--
sec-Butylbenzene	ND		ug/kg	50	--
tert-Butylbenzene	ND		ug/kg	100	--
o-Chlorotoluene	ND		ug/kg	100	--

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2408101
Report Date: 02/21/24

Method Blank Analysis Batch Quality Control

Analytical Method: 141,8260D
Analytical Date: 02/20/24 10:26
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 06 Batch: WG1887347-5					
p-Chlorotoluene	ND		ug/kg	100	--
1,2-Dibromo-3-chloropropane	ND		ug/kg	150	--
Hexachlorobutadiene	ND		ug/kg	200	--
Isopropylbenzene	ND		ug/kg	50	--
p-Isopropyltoluene	ND		ug/kg	50	--
Naphthalene	ND		ug/kg	200	--
n-Propylbenzene	ND		ug/kg	50	--
1,2,3-Trichlorobenzene	ND		ug/kg	100	--
1,2,4-Trichlorobenzene	ND		ug/kg	100	--
1,3,5-Trimethylbenzene	ND		ug/kg	100	--
1,2,4-Trimethylbenzene	ND		ug/kg	100	--
Diethyl ether	ND		ug/kg	100	--
Diisopropyl Ether	ND		ug/kg	100	--
Ethyl-Tert-Butyl-Ether	ND		ug/kg	100	--
Tertiary-Amyl Methyl Ether	ND		ug/kg	100	--
1,4-Dioxane	ND		ug/kg	4000	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	86		70-130
Toluene-d8	92		70-130
4-Bromofluorobenzene	87		70-130
Dibromofluoromethane	94		70-130

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2408101
Report Date: 02/21/24

Method Blank Analysis Batch Quality Control

Analytical Method: 141,8260D
 Analytical Date: 02/21/24 09:56
 Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 06 Batch: WG1887734-5					
Methylene chloride	ND		ug/kg	250	--
1,1-Dichloroethane	ND		ug/kg	50	--
Chloroform	ND		ug/kg	75	--
Carbon tetrachloride	ND		ug/kg	50	--
1,2-Dichloropropane	ND		ug/kg	50	--
Dibromochloromethane	ND		ug/kg	50	--
1,1,2-Trichloroethane	ND		ug/kg	50	--
Tetrachloroethene	ND		ug/kg	25	--
Chlorobenzene	ND		ug/kg	25	--
Trichlorofluoromethane	ND		ug/kg	200	--
1,2-Dichloroethane	ND		ug/kg	50	--
1,1,1-Trichloroethane	ND		ug/kg	25	--
Bromodichloromethane	ND		ug/kg	25	--
trans-1,3-Dichloropropene	ND		ug/kg	50	--
cis-1,3-Dichloropropene	ND		ug/kg	25	--
1,3-Dichloropropene, Total	ND		ug/kg	25	--
1,1-Dichloropropene	ND		ug/kg	25	--
Bromoform	ND		ug/kg	200	--
1,1,2,2-Tetrachloroethane	ND		ug/kg	25	--
Benzene	ND		ug/kg	25	--
Toluene	ND		ug/kg	50	--
Ethylbenzene	ND		ug/kg	50	--
Chloromethane	ND		ug/kg	200	--
Bromomethane	ND		ug/kg	100	--
Vinyl chloride	ND		ug/kg	50	--
Chloroethane	ND		ug/kg	100	--
1,1-Dichloroethene	ND		ug/kg	50	--
trans-1,2-Dichloroethene	ND		ug/kg	75	--
Trichloroethene	ND		ug/kg	25	--

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2408101
Report Date: 02/21/24

Method Blank Analysis Batch Quality Control

Analytical Method: 141,8260D
 Analytical Date: 02/21/24 09:56
 Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 06 Batch: WG1887734-5					
1,2-Dichlorobenzene	ND		ug/kg	100	--
1,3-Dichlorobenzene	ND		ug/kg	100	--
1,4-Dichlorobenzene	ND		ug/kg	100	--
Methyl tert butyl ether	ND		ug/kg	100	--
p/m-Xylene	ND		ug/kg	100	--
o-Xylene	ND		ug/kg	50	--
Xylenes, Total	ND		ug/kg	50	--
cis-1,2-Dichloroethene	ND		ug/kg	50	--
1,2-Dichloroethene, Total	ND		ug/kg	50	--
Dibromomethane	ND		ug/kg	100	--
1,2,3-Trichloropropane	ND		ug/kg	100	--
Styrene	ND		ug/kg	50	--
Dichlorodifluoromethane	ND		ug/kg	500	--
Acetone	ND		ug/kg	500	--
Carbon disulfide	ND		ug/kg	500	--
Methyl ethyl ketone	ND		ug/kg	500	--
Methyl isobutyl ketone	ND		ug/kg	500	--
2-Hexanone	ND		ug/kg	500	--
Bromochloromethane	ND		ug/kg	100	--
Tetrahydrofuran	ND		ug/kg	200	--
2,2-Dichloropropane	ND		ug/kg	100	--
1,2-Dibromoethane	ND		ug/kg	50	--
1,3-Dichloropropane	ND		ug/kg	100	--
1,1,1,2-Tetrachloroethane	ND		ug/kg	25	--
Bromobenzene	ND		ug/kg	100	--
n-Butylbenzene	ND		ug/kg	50	--
sec-Butylbenzene	ND		ug/kg	50	--
tert-Butylbenzene	ND		ug/kg	100	--
o-Chlorotoluene	ND		ug/kg	100	--

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2408101
Report Date: 02/21/24

Method Blank Analysis Batch Quality Control

Analytical Method: 141,8260D
Analytical Date: 02/21/24 09:56
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 06 Batch: WG1887734-5					
p-Chlorotoluene	ND		ug/kg	100	--
1,2-Dibromo-3-chloropropane	ND		ug/kg	150	--
Hexachlorobutadiene	ND		ug/kg	200	--
Isopropylbenzene	ND		ug/kg	50	--
p-Isopropyltoluene	ND		ug/kg	50	--
Naphthalene	ND		ug/kg	200	--
n-Propylbenzene	ND		ug/kg	50	--
1,2,3-Trichlorobenzene	ND		ug/kg	100	--
1,2,4-Trichlorobenzene	ND		ug/kg	100	--
1,3,5-Trimethylbenzene	ND		ug/kg	100	--
1,2,4-Trimethylbenzene	ND		ug/kg	100	--
Diethyl ether	ND		ug/kg	100	--
Diisopropyl Ether	ND		ug/kg	100	--
Ethyl-Tert-Butyl-Ether	ND		ug/kg	100	--
Tertiary-Amyl Methyl Ether	ND		ug/kg	100	--
1,4-Dioxane	ND		ug/kg	4000	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	85		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	86		70-130
Dibromofluoromethane	94		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2408101

Report Date: 02/21/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 07,12 Batch: WG1886042-3 WG1886042-4								
Methylene chloride	77		78		70-130	1		20
1,1-Dichloroethane	81		81		70-130	0		20
Chloroform	84		84		70-130	0		20
Carbon tetrachloride	73		73		70-130	0		20
1,2-Dichloropropane	85		85		70-130	0		20
Dibromochloromethane	90		90		70-130	0		20
1,1,2-Trichloroethane	86		86		70-130	0		20
Tetrachloroethene	91		90		70-130	1		20
Chlorobenzene	86		85		70-130	1		20
Trichlorofluoromethane	73		72		70-130	1		20
1,2-Dichloroethane	84		84		70-130	0		20
1,1,1-Trichloroethane	86		85		70-130	1		20
Bromodichloromethane	87		86		70-130	1		20
trans-1,3-Dichloropropene	92		92		70-130	0		20
cis-1,3-Dichloropropene	92		92		70-130	0		20
1,1-Dichloropropene	88		88		70-130	0		20
Bromoform	89		87		70-130	2		20
1,1,2,2-Tetrachloroethane	83		82		70-130	1		20
Benzene	84		84		70-130	0		20
Toluene	84		84		70-130	0		20
Ethylbenzene	86		86		70-130	0		20
Chloromethane	67	Q	67	Q	70-130	0		20
Bromomethane	73		73		70-130	0		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2408101

Report Date: 02/21/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 07,12 Batch: WG1886042-3 WG1886042-4								
Vinyl chloride	72		72		70-130	0		20
Chloroethane	78		78		70-130	0		20
1,1-Dichloroethene	68	Q	68	Q	70-130	0		20
trans-1,2-Dichloroethene	80		80		70-130	0		20
Trichloroethene	86		86		70-130	0		20
1,2-Dichlorobenzene	88		87		70-130	1		20
1,3-Dichlorobenzene	88		87		70-130	1		20
1,4-Dichlorobenzene	87		86		70-130	1		20
Methyl tert butyl ether	86		86		70-130	0		20
p/m-Xylene	88		88		70-130	0		20
o-Xylene	88		88		70-130	0		20
cis-1,2-Dichloroethene	84		83		70-130	1		20
Dibromomethane	86		84		70-130	2		20
1,2,3-Trichloropropane	82		81		70-130	1		20
Styrene	90		90		70-130	0		20
Dichlorodifluoromethane	62	Q	62	Q	70-130	0		20
Acetone	64	Q	64	Q	70-130	0		20
Carbon disulfide	68	Q	68	Q	70-130	0		20
Methyl ethyl ketone	71		71		70-130	0		20
Methyl isobutyl ketone	85		85		70-130	0		20
2-Hexanone	78		76		70-130	3		20
Bromochloromethane	87		86		70-130	1		20
Tetrahydrofuran	65	Q	64	Q	70-130	2		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2408101

Report Date: 02/21/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 07,12 Batch: WG1886042-3 WG1886042-4								
2,2-Dichloropropane	87		86		70-130	1		20
1,2-Dibromoethane	88		87		70-130	1		20
1,3-Dichloropropane	86		85		70-130	1		20
1,1,1,2-Tetrachloroethane	89		89		70-130	0		20
Bromobenzene	89		88		70-130	1		20
n-Butylbenzene	91		89		70-130	2		20
sec-Butylbenzene	89		88		70-130	1		20
tert-Butylbenzene	89		89		70-130	0		20
o-Chlorotoluene	88		87		70-130	1		20
p-Chlorotoluene	88		88		70-130	0		20
1,2-Dibromo-3-chloropropane	82		80		70-130	2		20
Hexachlorobutadiene	84		82		70-130	2		20
Isopropylbenzene	89		88		70-130	1		20
p-Isopropyltoluene	90		89		70-130	1		20
Naphthalene	88		86		70-130	2		20
n-Propylbenzene	88		88		70-130	0		20
1,2,3-Trichlorobenzene	92		90		70-130	2		20
1,2,4-Trichlorobenzene	94		90		70-130	4		20
1,3,5-Trimethylbenzene	90		88		70-130	2		20
1,2,4-Trimethylbenzene	90		89		70-130	1		20
Diethyl ether	86		85		70-130	1		20
Diisopropyl Ether	83		83		70-130	0		20
Ethyl-Tert-Butyl-Ether	91		90		70-130	1		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2408101

Report Date: 02/21/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 07,12 Batch: WG1886042-3 WG1886042-4								
Tertiary-Amyl Methyl Ether	94		93		70-130	1		20
1,4-Dioxane	87		84		70-130	4		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	90		89		70-130
Toluene-d8	92		92		70-130
4-Bromofluorobenzene	94		94		70-130
Dibromofluoromethane	91		92		70-130

Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2408101

Report Date: 02/21/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-05,08-11,13 Batch: WG1886062-3 WG1886062-4								
Methylene chloride	77		78		70-130	1		20
1,1-Dichloroethane	81		81		70-130	0		20
Chloroform	84		84		70-130	0		20
Carbon tetrachloride	73		73		70-130	0		20
1,2-Dichloropropane	85		85		70-130	0		20
Dibromochloromethane	90		90		70-130	0		20
1,1,2-Trichloroethane	86		86		70-130	0		20
Tetrachloroethene	91		90		70-130	1		20
Chlorobenzene	86		85		70-130	1		20
Trichlorofluoromethane	73		72		70-130	1		20
1,2-Dichloroethane	84		84		70-130	0		20
1,1,1-Trichloroethane	86		85		70-130	1		20
Bromodichloromethane	87		86		70-130	1		20
trans-1,3-Dichloropropene	92		92		70-130	0		20
cis-1,3-Dichloropropene	92		92		70-130	0		20
1,1-Dichloropropene	88		88		70-130	0		20
Bromoform	89		87		70-130	2		20
1,1,2,2-Tetrachloroethane	83		82		70-130	1		20
Benzene	84		84		70-130	0		20
Toluene	84		84		70-130	0		20
Ethylbenzene	86		86		70-130	0		20
Chloromethane	67	Q	67	Q	70-130	0		20
Bromomethane	73		73		70-130	0		20

Lab Control Sample Analysis Batch Quality Control

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2408101

Report Date: 02/21/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-05,08-11,13 Batch: WG1886062-3 WG1886062-4								
Vinyl chloride	72		72		70-130	0		20
Chloroethane	78		78		70-130	0		20
1,1-Dichloroethene	68	Q	68	Q	70-130	0		20
trans-1,2-Dichloroethene	80		80		70-130	0		20
Trichloroethene	86		86		70-130	0		20
1,2-Dichlorobenzene	88		87		70-130	1		20
1,3-Dichlorobenzene	88		87		70-130	1		20
1,4-Dichlorobenzene	87		86		70-130	1		20
Methyl tert butyl ether	86		86		70-130	0		20
p/m-Xylene	88		88		70-130	0		20
o-Xylene	88		88		70-130	0		20
cis-1,2-Dichloroethene	84		83		70-130	1		20
Dibromomethane	86		84		70-130	2		20
1,2,3-Trichloropropane	82		81		70-130	1		20
Styrene	90		90		70-130	0		20
Dichlorodifluoromethane	62	Q	62	Q	70-130	0		20
Acetone	64	Q	64	Q	70-130	0		20
Carbon disulfide	68	Q	68	Q	70-130	0		20
Methyl ethyl ketone	71		71		70-130	0		20
Methyl isobutyl ketone	85		85		70-130	0		20
2-Hexanone	78		76		70-130	3		20
Bromochloromethane	87		86		70-130	1		20
Tetrahydrofuran	65	Q	64	Q	70-130	2		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2408101

Report Date: 02/21/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-05,08-11,13 Batch: WG1886062-3 WG1886062-4								
2,2-Dichloropropane	87		86		70-130	1		20
1,2-Dibromoethane	88		87		70-130	1		20
1,3-Dichloropropane	86		85		70-130	1		20
1,1,1,2-Tetrachloroethane	89		89		70-130	0		20
Bromobenzene	89		88		70-130	1		20
n-Butylbenzene	91		89		70-130	2		20
sec-Butylbenzene	89		88		70-130	1		20
tert-Butylbenzene	89		89		70-130	0		20
o-Chlorotoluene	88		87		70-130	1		20
p-Chlorotoluene	88		88		70-130	0		20
1,2-Dibromo-3-chloropropane	82		80		70-130	2		20
Hexachlorobutadiene	84		82		70-130	2		20
Isopropylbenzene	89		88		70-130	1		20
p-Isopropyltoluene	90		89		70-130	1		20
Naphthalene	88		86		70-130	2		20
n-Propylbenzene	88		88		70-130	0		20
1,2,3-Trichlorobenzene	92		90		70-130	2		20
1,2,4-Trichlorobenzene	94		90		70-130	4		20
1,3,5-Trimethylbenzene	90		88		70-130	2		20
1,2,4-Trimethylbenzene	90		89		70-130	1		20
Diethyl ether	86		85		70-130	1		20
Diisopropyl Ether	83		83		70-130	0		20
Ethyl-Tert-Butyl-Ether	91		90		70-130	1		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2408101

Report Date: 02/21/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-05,08-11,13 Batch: WG1886062-3 WG1886062-4								
Tertiary-Amyl Methyl Ether	94		93		70-130	1		20
1,4-Dioxane	87		84		70-130	4		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	90		89		70-130
Toluene-d8	92		92		70-130
4-Bromofluorobenzene	94		94		70-130
Dibromofluoromethane	91		92		70-130

Lab Control Sample Analysis Batch Quality Control

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2408101

Report Date: 02/21/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 06 Batch: WG1887347-3 WG1887347-4								
Methylene chloride	95		93		70-130	2		20
1,1-Dichloroethane	97		93		70-130	4		20
Chloroform	98		95		70-130	3		20
Carbon tetrachloride	100		97		70-130	3		20
1,2-Dichloropropane	90		87		70-130	3		20
Dibromochloromethane	96		95		70-130	1		20
1,1,2-Trichloroethane	87		86		70-130	1		20
Tetrachloroethene	111		106		70-130	5		20
Chlorobenzene	103		100		70-130	3		20
Trichlorofluoromethane	113		110		70-130	3		20
1,2-Dichloroethane	86		85		70-130	1		20
1,1,1-Trichloroethane	113		108		70-130	5		20
Bromodichloromethane	93		91		70-130	2		20
trans-1,3-Dichloropropene	90		88		70-130	2		20
cis-1,3-Dichloropropene	96		93		70-130	3		20
1,1-Dichloropropene	106		102		70-130	4		20
Bromoform	87		87		70-130	0		20
1,1,2,2-Tetrachloroethane	76		78		70-130	3		20
Benzene	103		99		70-130	4		20
Toluene	103		98		70-130	5		20
Ethylbenzene	104		101		70-130	3		20
Chloromethane	68	Q	64	Q	70-130	6		20
Bromomethane	120		109		70-130	10		20

Lab Control Sample Analysis Batch Quality Control

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2408101

Report Date: 02/21/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 06 Batch: WG1887347-3 WG1887347-4								
Vinyl chloride	80		76		70-130	5		20
Chloroethane	98		93		70-130	5		20
1,1-Dichloroethene	110		106		70-130	4		20
trans-1,2-Dichloroethene	107		104		70-130	3		20
Trichloroethene	110		106		70-130	4		20
1,2-Dichlorobenzene	100		97		70-130	3		20
1,3-Dichlorobenzene	104		101		70-130	3		20
1,4-Dichlorobenzene	103		99		70-130	4		20
Methyl tert butyl ether	85		85		70-130	0		20
p/m-Xylene	110		106		70-130	4		20
o-Xylene	104		101		70-130	3		20
cis-1,2-Dichloroethene	102		98		70-130	4		20
Dibromomethane	89		87		70-130	2		20
1,2,3-Trichloropropane	76		77		70-130	1		20
Styrene	102		99		70-130	3		20
Dichlorodifluoromethane	49	Q	46	Q	70-130	6		20
Acetone	68	Q	67	Q	70-130	1		20
Carbon disulfide	97		94		70-130	3		20
Methyl ethyl ketone	62	Q	65	Q	70-130	5		20
Methyl isobutyl ketone	69	Q	70		70-130	1		20
2-Hexanone	64	Q	65	Q	70-130	2		20
Bromochloromethane	97		95		70-130	2		20
Tetrahydrofuran	58	Q	63	Q	70-130	8		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2408101

Report Date: 02/21/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 06 Batch: WG1887347-3 WG1887347-4								
2,2-Dichloropropane	106		101		70-130	5		20
1,2-Dibromoethane	92		91		70-130	1		20
1,3-Dichloropropane	88		87		70-130	1		20
1,1,1,2-Tetrachloroethane	102		100		70-130	2		20
Bromobenzene	99		96		70-130	3		20
n-Butylbenzene	107		103		70-130	4		20
sec-Butylbenzene	108		103		70-130	5		20
tert-Butylbenzene	107		102		70-130	5		20
o-Chlorotoluene	95		94		70-130	1		20
p-Chlorotoluene	98		93		70-130	5		20
1,2-Dibromo-3-chloropropane	74		79		70-130	7		20
Hexachlorobutadiene	115		111		70-130	4		20
Isopropylbenzene	105		100		70-130	5		20
p-Isopropyltoluene	108		104		70-130	4		20
Naphthalene	95		91		70-130	4		20
n-Propylbenzene	104		100		70-130	4		20
1,2,3-Trichlorobenzene	103		100		70-130	3		20
1,2,4-Trichlorobenzene	109		105		70-130	4		20
1,3,5-Trimethylbenzene	102		98		70-130	4		20
1,2,4-Trimethylbenzene	99		95		70-130	4		20
Diethyl ether	89		89		70-130	0		20
Diisopropyl Ether	85		82		70-130	4		20
Ethyl-Tert-Butyl-Ether	87		86		70-130	1		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2408101

Report Date: 02/21/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 06 Batch: WG1887347-3 WG1887347-4								
Tertiary-Amyl Methyl Ether	87		87		70-130	0		20
1,4-Dioxane	77		76		70-130	1		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	84		84		70-130
Toluene-d8	92		91		70-130
4-Bromofluorobenzene	87		87		70-130
Dibromofluoromethane	96		97		70-130

Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2408101

Report Date: 02/21/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 06 Batch: WG1887734-3 WG1887734-4								
Methylene chloride	96		96		70-130	0		20
1,1-Dichloroethane	98		98		70-130	0		20
Chloroform	99		100		70-130	1		20
Carbon tetrachloride	99		99		70-130	0		20
1,2-Dichloropropane	92		92		70-130	0		20
Dibromochloromethane	98		101		70-130	3		20
1,1,2-Trichloroethane	90		92		70-130	2		20
Tetrachloroethene	108		108		70-130	0		20
Chlorobenzene	103		104		70-130	1		20
Trichlorofluoromethane	106		106		70-130	0		20
1,2-Dichloroethane	88		90		70-130	2		20
1,1,1-Trichloroethane	112		111		70-130	1		20
Bromodichloromethane	96		96		70-130	0		20
trans-1,3-Dichloropropene	92		93		70-130	1		20
cis-1,3-Dichloropropene	97		98		70-130	1		20
1,1-Dichloropropene	104		104		70-130	0		20
Bromoform	94		96		70-130	2		20
1,1,2,2-Tetrachloroethane	84		85		70-130	1		20
Benzene	103		104		70-130	1		20
Toluene	102		102		70-130	0		20
Ethylbenzene	105		105		70-130	0		20
Chloromethane	66	Q	65	Q	70-130	2		20
Bromomethane	108		108		70-130	0		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2408101

Report Date: 02/21/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 06 Batch: WG1887734-3 WG1887734-4								
Vinyl chloride	75		76		70-130	1		20
Chloroethane	95		95		70-130	0		20
1,1-Dichloroethene	108		107		70-130	1		20
trans-1,2-Dichloroethene	108		107		70-130	1		20
Trichloroethene	108		109		70-130	1		20
1,2-Dichlorobenzene	102		102		70-130	0		20
1,3-Dichlorobenzene	106		105		70-130	1		20
1,4-Dichlorobenzene	104		104		70-130	0		20
Methyl tert butyl ether	88		90		70-130	2		20
p/m-Xylene	109		110		70-130	1		20
o-Xylene	104		104		70-130	0		20
cis-1,2-Dichloroethene	102		103		70-130	1		20
Dibromomethane	92		93		70-130	1		20
1,2,3-Trichloropropane	81		83		70-130	2		20
Styrene	101		101		70-130	0		20
Dichlorodifluoromethane	41	Q	41	Q	70-130	0		20
Acetone	77		69	Q	70-130	11		20
Carbon disulfide	96		96		70-130	0		20
Methyl ethyl ketone	68	Q	70		70-130	3		20
Methyl isobutyl ketone	73		76		70-130	4		20
2-Hexanone	69	Q	70		70-130	1		20
Bromochloromethane	98		99		70-130	1		20
Tetrahydrofuran	64	Q	64	Q	70-130	0		20

Lab Control Sample Analysis Batch Quality Control

Project Name: TUFTS STREET

Project Number: 045163

Lab Number: L2408101

Report Date: 02/21/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 06 Batch: WG1887734-3 WG1887734-4								
2,2-Dichloropropane	105		105		70-130	0		20
1,2-Dibromoethane	95		96		70-130	1		20
1,3-Dichloropropane	90		92		70-130	2		20
1,1,1,2-Tetrachloroethane	104		105		70-130	1		20
Bromobenzene	101		100		70-130	1		20
n-Butylbenzene	108		106		70-130	2		20
sec-Butylbenzene	108		107		70-130	1		20
tert-Butylbenzene	107		106		70-130	1		20
o-Chlorotoluene	95		98		70-130	3		20
p-Chlorotoluene	99		98		70-130	1		20
1,2-Dibromo-3-chloropropane	86		87		70-130	1		20
Hexachlorobutadiene	116		115		70-130	1		20
Isopropylbenzene	104		104		70-130	0		20
p-Isopropyltoluene	109		108		70-130	1		20
Naphthalene	96		96		70-130	0		20
n-Propylbenzene	105		104		70-130	1		20
1,2,3-Trichlorobenzene	107		107		70-130	0		20
1,2,4-Trichlorobenzene	114		112		70-130	2		20
1,3,5-Trimethylbenzene	103		101		70-130	2		20
1,2,4-Trimethylbenzene	100		100		70-130	0		20
Diethyl ether	91		94		70-130	3		20
Diisopropyl Ether	86		87		70-130	1		20
Ethyl-Tert-Butyl-Ether	90		91		70-130	1		20

Lab Control Sample Analysis Batch Quality Control

Project Name: TUFTS STREET

Lab Number: L2408101

Project Number: 045163

Report Date: 02/21/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 06 Batch: WG1887734-3 WG1887734-4								
Tertiary-Amyl Methyl Ether	89		91		70-130	2		20
1,4-Dioxane	90		91		70-130	1		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	84		86		70-130
Toluene-d8	91		91		70-130
4-Bromofluorobenzene	85		86		70-130
Dibromofluoromethane	96		98		70-130

INORGANICS & MISCELLANEOUS

Project Name: TUFTS STREET**Project Number:** 045163**Lab Number:** L2408101**Report Date:** 02/21/24**SAMPLE RESULTS****Lab ID:** L2408101-01**Client ID:** 50TUFT-B101(0-1)**Sample Location:** SOMERVILLE, MA**Date Collected:** 02/12/24 08:30**Date Received:** 02/14/24**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	80.0		%	0.100	NA	1	-	02/15/24 08:23	121,2540G	ROI



Project Name: TUFTS STREET**Project Number:** 045163**Lab Number:** L2408101**Report Date:** 02/21/24**SAMPLE RESULTS****Lab ID:** L2408101-02**Client ID:** 50TUFT-B101(1-3)**Sample Location:** SOMERVILLE, MA**Date Collected:** 02/12/24 08:31**Date Received:** 02/14/24**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	89.7		%	0.100	NA	1	-	02/15/24 08:23	121,2540G	ROI



Project Name: TUFTS STREET**Project Number:** 045163**Lab Number:** L2408101**Report Date:** 02/21/24**SAMPLE RESULTS****Lab ID:** L2408101-03**Client ID:** 50TUFT-B101(3-5)**Sample Location:** SOMERVILLE, MA**Date Collected:** 02/12/24 08:32**Date Received:** 02/14/24**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	91.1		%	0.100	NA	1	-	02/15/24 08:23	121,2540G	ROI



Project Name: TUFTS STREET**Project Number:** 045163**Lab Number:** L2408101**Report Date:** 02/21/24**SAMPLE RESULTS****Lab ID:** L2408101-04**Client ID:** 50TUFT-B102(0-1)**Sample Location:** SOMERVILLE, MA**Date Collected:** 02/12/24 09:00**Date Received:** 02/14/24**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	93.6		%	0.100	NA	1	-	02/15/24 08:23	121,2540G	ROI



Project Name: TUFTS STREET**Project Number:** 045163**Lab Number:** L2408101**Report Date:** 02/21/24**SAMPLE RESULTS****Lab ID:** L2408101-05**Client ID:** 50TUFT-B102(1-3)**Sample Location:** SOMERVILLE, MA**Date Collected:** 02/12/24 09:01**Date Received:** 02/14/24**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	91.6		%	0.100	NA	1	-	02/15/24 08:23	121,2540G	ROI



Project Name: TUFTS STREET**Project Number:** 045163**Lab Number:** L2408101**Report Date:** 02/21/24**SAMPLE RESULTS****Lab ID:** L2408101-06**Client ID:** 50TUFT-B103(0-1)**Sample Location:** SOMERVILLE, MA**Date Collected:** 02/12/24 09:30**Date Received:** 02/14/24**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	90.1		%	0.100	NA	1	-	02/15/24 08:23	121,2540G	ROI



Project Name: TUFTS STREET**Project Number:** 045163**Lab Number:** L2408101**Report Date:** 02/21/24**SAMPLE RESULTS****Lab ID:** L2408101-07**Client ID:** 50TUFT-B103(1-3)**Sample Location:** SOMERVILLE, MA**Date Collected:** 02/12/24 09:31**Date Received:** 02/14/24**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	81.4		%	0.100	NA	1	-	02/15/24 08:23	121,2540G	ROI



Project Name: TUFTS STREET**Project Number:** 045163**Lab Number:** L2408101**Report Date:** 02/21/24**SAMPLE RESULTS****Lab ID:** L2408101-08**Client ID:** 50TUFT-B103(3-5)**Sample Location:** SOMERVILLE, MA**Date Collected:** 02/12/24 09:32**Date Received:** 02/14/24**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	85.7		%	0.100	NA	1	-	02/15/24 08:23	121,2540G	ROI



Project Name: TUFTS STREET**Project Number:** 045163**Lab Number:** L2408101**Report Date:** 02/21/24**SAMPLE RESULTS****Lab ID:** L2408101-09**Client ID:** 50TUFT-B104(0-1)**Sample Location:** SOMERVILLE, MA**Date Collected:** 02/12/24 10:00**Date Received:** 02/14/24**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	90.8		%	0.100	NA	1	-	02/15/24 08:23	121,2540G	ROI



Project Name: TUFTS STREET**Project Number:** 045163**Lab Number:** L2408101**Report Date:** 02/21/24**SAMPLE RESULTS****Lab ID:** L2408101-10**Client ID:** 50TUFT-B104(1-3)**Sample Location:** SOMERVILLE, MA**Date Collected:** 02/12/24 10:01**Date Received:** 02/14/24**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	79.6		%	0.100	NA	1	-	02/15/24 08:23	121,2540G	ROI



Project Name: TUFTS STREET**Project Number:** 045163**Lab Number:** L2408101**Report Date:** 02/21/24**SAMPLE RESULTS****Lab ID:** L2408101-11**Client ID:** 50TUFT-B104(3-5)**Sample Location:** SOMERVILLE, MA**Date Collected:** 02/12/24 10:02**Date Received:** 02/14/24**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	82.3		%	0.100	NA	1	-	02/15/24 08:23	121,2540G	ROI



Project Name: TUFTS STREET**Project Number:** 045163**Lab Number:** L2408101**Report Date:** 02/21/24**SAMPLE RESULTS****Lab ID:** L2408101-12**Client ID:** 50TUFT-B105(0-1)**Sample Location:** SOMERVILLE, MA**Date Collected:** 02/12/24 11:00**Date Received:** 02/14/24**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	92.1		%	0.100	NA	1	-	02/15/24 08:23	121,2540G	ROI



Project Name: TUFTS STREET**Project Number:** 045163**Lab Number:** L2408101**Report Date:** 02/21/24**SAMPLE RESULTS****Lab ID:** L2408101-13**Client ID:** 50TUFT-B105(1-3)**Sample Location:** SOMERVILLE, MA**Date Collected:** 02/12/24 11:01**Date Received:** 02/14/24**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	82.8		%	0.100	NA	1	-	02/15/24 08:23	121,2540G	ROI



Lab Duplicate Analysis
Batch Quality Control

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2408101
Report Date: 02/21/24

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-13 QC Batch ID: WG1885410-1 QC Sample: L2408101-01 Client ID: 50TUFT-B101(0-1)						
Solids, Total	80.0	79.7	%	0		20



Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

CoolerA

Custody SealAbsent

Container Information			Initial	Final	Temp		Frozen		Analysis(*)
Container ID	Container Type	Cooler	pH	pH	deg C	Pres	Seal	Date/Time	
L2408101-01A	Vial MeOH preserved	A	NA		2.8	Y	Absent		MCP-8260HLW-21(14)
L2408101-01B	Vial water preserved	A	NA		2.8	Y	Absent	12-FEB-24 12:45	MCP-8260HLW-21(14)
L2408101-01C	Vial water preserved	A	NA		2.8	Y	Absent	12-FEB-24 12:45	MCP-8260HLW-21(14)
L2408101-01D	Plastic 2oz unpreserved for TS	A	NA		2.8	Y	Absent		TS(7)
L2408101-02A	Vial MeOH preserved	A	NA		2.8	Y	Absent		MCP-8260HLW-21(14)
L2408101-02B	Vial water preserved	A	NA		2.8	Y	Absent	12-FEB-24 12:45	MCP-8260HLW-21(14)
L2408101-02C	Vial water preserved	A	NA		2.8	Y	Absent	12-FEB-24 12:45	MCP-8260HLW-21(14)
L2408101-02D	Plastic 2oz unpreserved for TS	A	NA		2.8	Y	Absent		TS(7)
L2408101-03A	Vial MeOH preserved	A	NA		2.8	Y	Absent		MCP-8260HLW-21(14)
L2408101-03B	Vial water preserved	A	NA		2.8	Y	Absent	12-FEB-24 12:45	MCP-8260HLW-21(14)
L2408101-03C	Vial water preserved	A	NA		2.8	Y	Absent	12-FEB-24 12:45	MCP-8260HLW-21(14)
L2408101-03D	Plastic 2oz unpreserved for TS	A	NA		2.8	Y	Absent		TS(7)
L2408101-04A	Vial MeOH preserved	A	NA		2.8	Y	Absent		MCP-8260HLW-21(14)
L2408101-04B	Vial water preserved	A	NA		2.8	Y	Absent	12-FEB-24 12:45	MCP-8260HLW-21(14)
L2408101-04C	Vial water preserved	A	NA		2.8	Y	Absent	12-FEB-24 12:45	MCP-8260HLW-21(14)
L2408101-04D	Plastic 2oz unpreserved for TS	A	NA		2.8	Y	Absent		TS(7)
L2408101-05A	Vial MeOH preserved	A	NA		2.8	Y	Absent		MCP-8260HLW-21(14)
L2408101-05B	Vial water preserved	A	NA		2.8	Y	Absent	12-FEB-24 12:45	MCP-8260HLW-21(14)
L2408101-05C	Vial water preserved	A	NA		2.8	Y	Absent	12-FEB-24 12:45	MCP-8260HLW-21(14)
L2408101-05D	Plastic 2oz unpreserved for TS	A	NA		2.8	Y	Absent		TS(7)
L2408101-06A	Vial MeOH preserved	A	NA		2.8	Y	Absent		MCP-8260HLW-21(14)
L2408101-06B	Vial water preserved	A	NA		2.8	Y	Absent	12-FEB-24 12:45	MCP-8260HLW-21(14)
L2408101-06C	Vial water preserved	A	NA		2.8	Y	Absent	12-FEB-24 12:45	MCP-8260HLW-21(14)



Project Name: TUFTS STREET
Project Number: 045163

Serial_No:02212414:57
Lab Number: L2408101
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Container Information			Initial		Final		Temp		Frozen		Analysis(*)
Container ID	Container Type	Cooler	pH	pH	pH	deg	C	Pres	Seal	Date/Time	
L2408101-06D	Plastic 2oz unpreserved for TS	A	NA	NA	2.8	Y	Y	Y	Absent	TS(7)	
L2408101-07A	Vial MeOH preserved	A	NA	NA	2.8	Y	Y	Y	Absent	MCP-8260HLW-21(14)	
L2408101-07B	Vial water preserved	A	NA	NA	2.8	Y	Y	Y	Absent	12-FEB-24 12:45	MCP-8260HLW-21(14)
L2408101-07C	Vial water preserved	A	NA	NA	2.8	Y	Y	Y	Absent	12-FEB-24 12:45	MCP-8260HLW-21(14)
L2408101-07D	Plastic 2oz unpreserved for TS	A	NA	NA	2.8	Y	Y	Y	Absent	TS(7)	
L2408101-08A	Vial MeOH preserved	A	NA	NA	2.8	Y	Y	Y	Absent	MCP-8260HLW-21(14)	
L2408101-08B	Vial water preserved	A	NA	NA	2.8	Y	Y	Y	Absent	12-FEB-24 12:45	MCP-8260HLW-21(14)
L2408101-08C	Vial water preserved	A	NA	NA	2.8	Y	Y	Y	Absent	12-FEB-24 12:45	MCP-8260HLW-21(14)
L2408101-08D	Plastic 2oz unpreserved for TS	A	NA	NA	2.8	Y	Y	Y	Absent	TS(7)	
L2408101-09A	Vial MeOH preserved	A	NA	NA	2.8	Y	Y	Y	Absent	MCP-8260HLW-21(14)	
L2408101-09B	Vial water preserved	A	NA	NA	2.8	Y	Y	Y	Absent	12-FEB-24 12:45	MCP-8260HLW-21(14)
L2408101-09C	Vial water preserved	A	NA	NA	2.8	Y	Y	Y	Absent	12-FEB-24 12:45	MCP-8260HLW-21(14)
L2408101-09D	Plastic 2oz unpreserved for TS	A	NA	NA	2.8	Y	Y	Y	Absent	TS(7)	
L2408101-10A	Vial MeOH preserved	A	NA	NA	2.8	Y	Y	Y	Absent	MCP-8260HLW-21(14)	
L2408101-10B	Vial water preserved	A	NA	NA	2.8	Y	Y	Y	Absent	12-FEB-24 12:45	MCP-8260HLW-21(14)
L2408101-10C	Vial water preserved	A	NA	NA	2.8	Y	Y	Y	Absent	12-FEB-24 12:45	MCP-8260HLW-21(14)
L2408101-10D	Plastic 2oz unpreserved for TS	A	NA	NA	2.8	Y	Y	Y	Absent	TS(7)	
L2408101-11A	Vial MeOH preserved	A	NA	NA	2.8	Y	Y	Y	Absent	MCP-8260HLW-21(14)	
L2408101-11B	Vial water preserved	A	NA	NA	2.8	Y	Y	Y	Absent	12-FEB-24 12:45	MCP-8260HLW-21(14)
L2408101-11C	Vial water preserved	A	NA	NA	2.8	Y	Y	Y	Absent	12-FEB-24 12:45	MCP-8260HLW-21(14)
L2408101-11D	Plastic 2oz unpreserved for TS	A	NA	NA	2.8	Y	Y	Y	Absent	TS(7)	
L2408101-12A	Vial MeOH preserved	A	NA	NA	2.8	Y	Y	Y	Absent	MCP-8260HLW-21(14)	
L2408101-12B	Vial water preserved	A	NA	NA	2.8	Y	Y	Y	Absent	12-FEB-24 12:45	MCP-8260HLW-21(14)
L2408101-12C	Vial water preserved	A	NA	NA	2.8	Y	Y	Y	Absent	12-FEB-24 12:45	MCP-8260HLW-21(14)
L2408101-12D	Plastic 2oz unpreserved for TS	A	NA	NA	2.8	Y	Y	Y	Absent	TS(7)	
L2408101-13A	Vial MeOH preserved	A	NA	NA	2.8	Y	Y	Y	Absent	MCP-8260HLW-21(14)	
L2408101-13B	Vial water preserved	A	NA	NA	2.8	Y	Y	Y	Absent	12-FEB-24 12:45	MCP-8260HLW-21(14)
L2408101-13C	Vial water preserved	A	NA	NA	2.8	Y	Y	Y	Absent	12-FEB-24 12:45	MCP-8260HLW-21(14)

Container Information

Container ID	Container Type
L2408101-13D	Plastic 2oz unpreserved for TS

Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
A	NA		2.8	Y	Absent		TS(7)

*Values in parentheses indicate holding time in days



Project Name: TUFTS STREET
Project Number: 045163

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GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report



Project Name: TUFTS STREET
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Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

Report Format: Data Usability Report



Project Name: TUFTS STREET
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Data Qualifiers

- ND** - Not detected at the reporting limit (RL) for the sample.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: TUFTS STREET
Project Number: 045163

Lab Number: L2408101
Report Date: 02/21/24

REFERENCES

- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.
- 141 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA and IIB, November 2021.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Alpha Analytical, Inc.Facility: **Company-wide**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

Revision 20

Published Date: 6/16/2023 4:52:28 PM

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Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility**EPA 624.1:** m/p-xylene, o-xylene, Naphthalene**EPA 625.1:** alpha-Terpineol**EPA 8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.**Mansfield Facility****SM 2540D:** TSS.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:**Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,****EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.****Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:**Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,****SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables).**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.****Mansfield Facility:****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.**EPA 522, EPA 537.1.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1** Hg.**SM2340B**

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

Chain-of-Custody Record				Laboratory: Alpha		Laboratory Job # <u>L2908101</u> (Lab use only)					
 GEI Consultants 400 Unicorn Park Drive Woburn, MA 01801 PH: 781.721.4000		Project Information						Page 1 of 2			
		Project Name: Tufts St			Project Location: Somerville, MA						
		Project Number: 045163			Project Manager: Chris Coner						
		Send Report to: cconer@geiconsultants.com labdata@geiconsultants.com			Preservative MeOH/H ₂ O: None						
MCP PRESUMPTIVE CERTAINTY AND MCP ANALYTICAL METHODS REQUIRED: YES NO							Sample Handling Samples Field Filtered YES NO <u>NA</u> Sampled Shipped With Ice YES NO				
STATE AND FEDERAL REGULATORY REQUIREMENTS/REPORT LIMITS State/Federal Program: <u>MA 401WQC</u> Other <u> </u> NH RI CT NY ME											
MA MCP Criteria are Method 13-1 and GW-2/GW-3. Circle if GW-1 is required.											
Lab Sample Number	GEI Sample ID	Collection		Matrix	No. of Bottles	Sampler(s) Initials	VOCs (g/L)	% Solids			Sample Specific Remarks
		Date	Time								
08101-01	50TUFT-B101(0-1)	2/12/2024	8:30	SO	4	NMT	X	X			
02	50TUFT-B101(1-3)	2/12/2024	8:31	SO	4	NMT	X	X			
03	50TUFT-B101(3-5)	2/12/2024	8:32	SO	4	NMT	X	X			
04	50TUFT-B102(0-1)	2/12/2024	9:00	SO	4	NMT	X	X			
05	50TUFT-B102(1-3)	2/12/2024	9:01	SO	4	NMT	X	X			
06	50TUFT-B103(0-1)	2/12/2024	9:30	SO	4	NMT	X	X			
07	50TUFT-B103(1-3)	2/12/2024	9:31	SO	4	NMT	X	X			
08	50TUFT-B103(3-5)	2/12/2024	9:32	SO	4	NMT	X	X			
09	50TUFT-B104(0-1)	2/12/2024	10:00	SO	4	NMT	X	X			
10	50TUFT-B104(1-3)	2/12/2024	10:01	SO	4	NMT	X	X			
11	50TUFT-B104(3-5)	2/12/2024	10:02	SO	4	NMT	X	X			
12	50TUFT-B105(0-1)	2/12/2024	11:00	SO	4	NMT	X	X			
Relinquished by sampler: (signature)		Date:	Time:	Received by: (signature)		Turnaround Time (Business days): Standard TAT <u>X</u> 4-Day <u> </u> 3-Day <u> </u> 2-Day <u> </u> 1-Day <u> </u> Other <u> </u>			Before submitting rush turnaround samples, you must notify the laboratory to confirm that the TAT can be achieved.		
1. Nicholas Tuorcole		2/12/2024	12:45	1. GEI Sample Fridge							
Relinquished by sampler: (signature)		Date:	Time:	Received by: (signature)		Additional Requirements/Comments/Remarks: VOAs frozen on 2/12/2024					
2. GEI Sample Fridge		2/14/24	12:00	2. [Signature]							
Relinquished by: (signature)		Date:	Time:	Received by: (signature)							
[Signature]		2/14/24	12:00	3. [Signature]							
Relinquished by: (signature)		Date:	Time:	Received by: (signature)							
[Signature]		2/14/24	12:15	4. [Signature]							
Relinquished by: (signature)		Date:	Time:	Received by: (signature)							
5.				5.							

Sample Matrix Abbreviations: SO = Soil GW = Groundwater SW = Surface Water SD = Sediment CO = Concrete PC = Paint Chip CLK = Caulk

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Method Blank Summary

Form 4

Volatiles

Client : GEI Consultants
Project Name : TUFTS STREET
Lab Sample ID : WG1886042-5
Instrument ID : VOA100
Matrix : SOIL

Lab Number : L2408101
Project Number : 045163
Lab File ID : V00240215A06
Analysis Date : 02/15/24 13:52

Client Sample No.	Lab Sample ID	Analysis Date
WG1886042-3LCS	WG1886042-3	02/15/24 11:51
WG1886042-4LCSD	WG1886042-4	02/15/24 12:22
50TUFT-B103(1-3)	L2408101-07	02/15/24 20:26
50TUFT-B105(0-1)	L2408101-12	02/15/24 20:57

Method Blank Summary

Form 4

Volatiles

Client	: GEI Consultants	Lab Number	: L2408101
Project Name	: TUFTS STREET	Project Number	: 045163
Lab Sample ID	: WG1886062-5	Lab File ID	: V00240215A06
Instrument ID	: VOA100		
Matrix	: SOIL	Analysis Date	: 02/15/24 13:52

Client Sample No.	Lab Sample ID	Analysis Date
WG1886062-3LCS	WG1886062-3	02/15/24 11:51
WG1886062-4LCSD	WG1886062-4	02/15/24 12:22
50TUFT-B101(0-1)	L2408101-01	02/15/24 15:23
50TUFT-B101(1-3)	L2408101-02	02/15/24 15:54
50TUFT-B101(3-5)	L2408101-03	02/15/24 16:24
50TUFT-B102(0-1)	L2408101-04	02/15/24 16:54
50TUFT-B102(1-3)	L2408101-05	02/15/24 17:25
50TUFT-B103(3-5)	L2408101-08	02/15/24 17:55
50TUFT-B104(0-1)	L2408101-09	02/15/24 18:25
50TUFT-B104(1-3)	L2408101-10	02/15/24 18:56
50TUFT-B104(3-5)	L2408101-11	02/15/24 19:26
50TUFT-B105(1-3)	L2408101-13	02/15/24 19:56

Method Blank Summary

Form 4

Volatiles

Client : GEI Consultants
Project Name : TUFTS STREET
Lab Sample ID : WG1887347-5
Instrument ID : VOA123
Matrix : SOIL

Lab Number : L2408101
Project Number : 045163
Lab File ID : V23240220A05
Analysis Date : 02/20/24 10:26

Client Sample No.	Lab Sample ID	Analysis Date
WG1887347-3LCS	WG1887347-3	02/20/24 08:43
WG1887347-4LCSD	WG1887347-4	02/20/24 09:09
50TUFT-B103(0-1)	L2408101-06	02/20/24 14:19

Method Blank Summary

Form 4

Volatiles

Client : GEI Consultants
Project Name : TUFTS STREET
Lab Sample ID : WG1887734-5
Instrument ID : VOA123
Matrix : SOIL

Lab Number : L2408101
Project Number : 045163
Lab File ID : V23240221A05
Analysis Date : 02/21/24 09:56

Client Sample No.	Lab Sample ID	Analysis Date
WG1887734-3LCS	WG1887734-3	02/21/24 08:39
WG1887734-4LCSD	WG1887734-4	02/21/24 09:05
50TUFT-B103(0-1)	L2408101-06D	02/21/24 12:25

Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : TUFTS STREET
 Instrument ID : VOA100
 Lab File ID : V00240215A02
 Sample No : WG1886062-2
 Channel :

Lab Number : L2408101
 Project Number : 045163
 Calibration Date : 02/15/24 11:51
 Init. Calib. Date(s) : 02/07/24 02/08/24
 Init. Calib. Times : 20:14 01:16

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	159	0
Dichlorodifluoromethane	0.319	0.199	-	37.6*	20	106	0
Chloromethane	0.487	0.328	-	32.6*	20	105	0
Vinyl chloride	0.371	0.265	-	28.6*	20	113	0
Bromomethane	0.176	0.129	-	26.7*	20	118	0
Chloroethane	0.187	0.145	-	22.5*	20	117	0
Trichlorofluoromethane	0.338	0.247	-	26.9*	20	125	0
Ethyl ether	0.105	0.091	-	13.3	20	130	0
1,1-Dichloroethene	40	27.291	-	31.8*	20	127	0
Carbon disulfide	0.84	0.567	-	32.5*	20	122	0
Methylene chloride	0.23	0.178	-	22.6*	20	121	0
Acetone	0.086	0.056	-	34.9*	20	110	0
trans-1,2-Dichloroethene	0.224	0.179	-	20.1*	20	124	0
Methyl tert-butyl ether	0.574	0.494	-	13.9	20	131	0
Diisopropyl ether	1.101	0.913	-	17.1	20	123	0
1,1-Dichloroethane	0.55	0.445	-	19.1	20	122	0
Ethyl tert-butyl ether	0.911	0.825	-	9.4	20	133	0
cis-1,2-Dichloroethene	0.267	0.223	-	16.5	20	129	0
2,2-Dichloropropane	0.344	0.298	-	13.4	20	139	0
Bromochloromethane	0.125	0.108	-	13.6	20	131	0
Chloroform	0.431	0.364	-	15.5	20	128	0
Carbon tetrachloride	40	29.31	-	26.7*	20	139	0
Tetrahydrofuran	0.09	0.059	-	34.4*	20	114	0
Dibromofluoromethane	0.275	0.25	-	9.1	20	142	0
1,1,1-Trichloroethane	0.352	0.302	-	14.2	20	135	0
2-Butanone	0.125	0.089	-	28.8*	20	118	0
1,1-Dichloropropene	0.307	0.269	-	12.4	20	138	0
Benzene	0.934	0.783	-	16.2	20	127	0
tert-Amyl methyl ether	0.606	0.567	-	6.4	20	141	0
1,2-Dichloroethane-d4	0.301	0.27	-	10.3	20	146	0
1,2-Dichloroethane	0.342	0.287	-	16.1	20	130	0
Trichloroethene	0.242	0.208	-	14	20	138	0
Dibromomethane	0.137	0.118	-	13.9	20	128	0
1,2-Dichloropropane	0.302	0.255	-	15.6	20	126	0
Bromodichloromethane	0.308	0.267*	-	13.3	20	126	0
1,4-Dioxane	0.00217	0.00189*	-	12.9	20	123	0
cis-1,3-Dichloropropene	0.362	0.333	-	8	20	130	0
Chlorobenzene-d5	1	1	-	0	20	155	0
Toluene-d8	1.383	1.273	-	8	20	142	0
Toluene	0.781	0.659	-	15.6	20	128	0
4-Methyl-2-pentanone	0.12	0.102	-	15	20	123	0
Tetrachloroethene	0.325	0.297	-	8.6	20	140	0
trans-1,3-Dichloropropene	0.418	0.384	-	8.1	20	133	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : TUFTS STREET
 Instrument ID : VOA100
 Lab File ID : V00240215A02
 Sample No : WG1886062-2
 Channel :

Lab Number : L2408101
 Project Number : 045163
 Calibration Date : 02/15/24 11:51
 Init. Calib. Date(s) : 02/07/24 02/08/24
 Init. Calib. Times : 20:14 01:16

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,1,2-Trichloroethane	0.208	0.179*	-	13.9	20	129	0
Chlorodibromomethane	0.31	0.28	-	9.7	20	131	0
1,3-Dichloropropane	0.436	0.375	-	14	20	129	0
1,2-Dibromoethane	0.252	0.223	-	11.5	20	130	0
2-Hexanone	0.224	0.174	-	22.3*	20	118	0
Chlorobenzene	0.884	0.756	-	14.5	20	129	0
Ethylbenzene	1.461	1.258	-	13.9	20	132	0
1,1,1,2-Tetrachloroethane	0.315	0.281	-	10.8	20	128	0
p/m Xylene	0.563	0.498	-	11.5	20	132	0
o Xylene	0.551	0.484	-	12.2	20	129	0
Styrene	0.901	0.81	-	10.1	20	130	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	152	0
Bromoform	0.373	0.333	-	10.7	20	131	0
Isopropylbenzene	2.707	2.418	-	10.7	20	134	0
4-Bromofluorobenzene	0.905	0.852	-	5.9	20	144	0
Bromobenzene	0.701	0.621	-	11.4	20	131	0
n-Propylbenzene	3.172	2.808	-	11.5	20	135	0
1,1,2,2-Tetrachloroethane	0.592	0.491	-	17.1	20	124	0
2-Chlorotoluene	1.899	1.662	-	12.5	20	131	0
1,3,5-Trimethylbenzene	2.325	2.087	-	10.2	20	137	0
1,2,3-Trichloropropane	0.478	0.394	-	17.6	20	126	0
4-Chlorotoluene	1.944	1.719	-	11.6	20	136	0
tert-Butylbenzene	2.015	1.79	-	11.2	20	138	0
1,2,4-Trimethylbenzene	2.268	2.039	-	10.1	20	136	0
sec-Butylbenzene	2.967	2.653	-	10.6	20	139	0
p-Isopropyltoluene	2.612	2.361	-	9.6	20	141	0
1,3-Dichlorobenzene	1.387	1.219	-	12.1	20	131	0
1,4-Dichlorobenzene	1.4	1.222	-	12.7	20	132	0
n-Butylbenzene	2.247	2.037	-	9.3	20	137	0
1,2-Dichlorobenzene	1.285	1.136	-	11.6	20	129	0
1,2-Dibromo-3-chloropropan	0.111	0.091	-	18	20	118	0
Hexachlorobutadiene	0.494	0.418	-	15.4	20	139	0
1,2,4-Trichlorobenzene	0.905	0.847	-	6.4	20	140	0
Naphthalene	2.069	1.829	-	11.6	20	127	0
1,2,3-Trichlorobenzene	0.847	0.778	-	8.1	20	135	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : TUFTS STREET
 Instrument ID : VOA100
 Lab File ID : V00240215A02
 Sample No : WG1886042-2
 Channel :

Lab Number : L2408101
 Project Number : 045163
 Calibration Date : 02/15/24 11:51
 Init. Calib. Date(s) : 02/07/24 02/08/24
 Init. Calib. Times : 20:14 01:16

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	159	0
Dichlorodifluoromethane	0.319	0.199	-	37.6*	20	106	0
Chloromethane	0.487	0.328	-	32.6*	20	105	0
Vinyl chloride	0.371	0.265	-	28.6*	20	113	0
Bromomethane	0.176	0.129	-	26.7*	20	118	0
Chloroethane	0.187	0.145	-	22.5*	20	117	0
Trichlorofluoromethane	0.338	0.247	-	26.9*	20	125	0
Ethyl ether	0.105	0.091	-	13.3	20	130	0
1,1-Dichloroethene	40	27.291	-	31.8*	20	127	0
Carbon disulfide	0.84	0.567	-	32.5*	20	122	0
Methylene chloride	0.23	0.178	-	22.6*	20	121	0
Acetone	0.086	0.056	-	34.9*	20	110	0
trans-1,2-Dichloroethene	0.224	0.179	-	20.1*	20	124	0
Methyl tert-butyl ether	0.574	0.494	-	13.9	20	131	0
Diisopropyl ether	1.101	0.913	-	17.1	20	123	0
1,1-Dichloroethane	0.55	0.445	-	19.1	20	122	0
Ethyl tert-butyl ether	0.911	0.825	-	9.4	20	133	0
cis-1,2-Dichloroethene	0.267	0.223	-	16.5	20	129	0
2,2-Dichloropropane	0.344	0.298	-	13.4	20	139	0
Bromochloromethane	0.125	0.108	-	13.6	20	131	0
Chloroform	0.431	0.364	-	15.5	20	128	0
Carbon tetrachloride	40	29.31	-	26.7*	20	139	0
Tetrahydrofuran	0.09	0.059	-	34.4*	20	114	0
Dibromofluoromethane	0.275	0.25	-	9.1	20	142	0
1,1,1-Trichloroethane	0.352	0.302	-	14.2	20	135	0
2-Butanone	0.125	0.089	-	28.8*	20	118	0
1,1-Dichloropropene	0.307	0.269	-	12.4	20	138	0
Benzene	0.934	0.783	-	16.2	20	127	0
tert-Amyl methyl ether	0.606	0.567	-	6.4	20	141	0
1,2-Dichloroethane-d4	0.301	0.27	-	10.3	20	146	0
1,2-Dichloroethane	0.342	0.287	-	16.1	20	130	0
Trichloroethene	0.242	0.208	-	14	20	138	0
Dibromomethane	0.137	0.118	-	13.9	20	128	0
1,2-Dichloropropane	0.302	0.255	-	15.6	20	126	0
Bromodichloromethane	0.308	0.267*	-	13.3	20	126	0
1,4-Dioxane	0.00217	0.00189*	-	12.9	20	123	0
cis-1,3-Dichloropropene	0.362	0.333	-	8	20	130	0
Chlorobenzene-d5	1	1	-	0	20	155	0
Toluene-d8	1.383	1.273	-	8	20	142	0
Toluene	0.781	0.659	-	15.6	20	128	0
4-Methyl-2-pentanone	0.12	0.102	-	15	20	123	0
Tetrachloroethene	0.325	0.297	-	8.6	20	140	0
trans-1,3-Dichloropropene	0.418	0.384	-	8.1	20	133	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : TUFTS STREET
 Instrument ID : VOA100
 Lab File ID : V00240215A02
 Sample No : WG1886042-2
 Channel :

Lab Number : L2408101
 Project Number : 045163
 Calibration Date : 02/15/24 11:51
 Init. Calib. Date(s) : 02/07/24 02/08/24
 Init. Calib. Times : 20:14 01:16

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,1,2-Trichloroethane	0.208	0.179*	-	13.9	20	129	0
Chlorodibromomethane	0.31	0.28	-	9.7	20	131	0
1,3-Dichloropropane	0.436	0.375	-	14	20	129	0
1,2-Dibromoethane	0.252	0.223	-	11.5	20	130	0
2-Hexanone	0.224	0.174	-	22.3*	20	118	0
Chlorobenzene	0.884	0.756	-	14.5	20	129	0
Ethylbenzene	1.461	1.258	-	13.9	20	132	0
1,1,1,2-Tetrachloroethane	0.315	0.281	-	10.8	20	128	0
p/m Xylene	0.563	0.498	-	11.5	20	132	0
o Xylene	0.551	0.484	-	12.2	20	129	0
Styrene	0.901	0.81	-	10.1	20	130	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	152	0
Bromoform	0.373	0.333	-	10.7	20	131	0
Isopropylbenzene	2.707	2.418	-	10.7	20	134	0
4-Bromofluorobenzene	0.905	0.852	-	5.9	20	144	0
Bromobenzene	0.701	0.621	-	11.4	20	131	0
n-Propylbenzene	3.172	2.808	-	11.5	20	135	0
1,1,2,2-Tetrachloroethane	0.592	0.491	-	17.1	20	124	0
2-Chlorotoluene	1.899	1.662	-	12.5	20	131	0
1,3,5-Trimethylbenzene	2.325	2.087	-	10.2	20	137	0
1,2,3-Trichloropropane	0.478	0.394	-	17.6	20	126	0
4-Chlorotoluene	1.944	1.719	-	11.6	20	136	0
tert-Butylbenzene	2.015	1.79	-	11.2	20	138	0
1,2,4-Trimethylbenzene	2.268	2.039	-	10.1	20	136	0
sec-Butylbenzene	2.967	2.653	-	10.6	20	139	0
p-Isopropyltoluene	2.612	2.361	-	9.6	20	141	0
1,3-Dichlorobenzene	1.387	1.219	-	12.1	20	131	0
1,4-Dichlorobenzene	1.4	1.222	-	12.7	20	132	0
n-Butylbenzene	2.247	2.037	-	9.3	20	137	0
1,2-Dichlorobenzene	1.285	1.136	-	11.6	20	129	0
1,2-Dibromo-3-chloropropan	0.111	0.091	-	18	20	118	0
Hexachlorobutadiene	0.494	0.418	-	15.4	20	139	0
1,2,4-Trichlorobenzene	0.905	0.847	-	6.4	20	140	0
Naphthalene	2.069	1.829	-	11.6	20	127	0
1,2,3-Trichlorobenzene	0.847	0.778	-	8.1	20	135	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : TUFTS STREET
 Instrument ID : VOA123
 Lab File ID : V23240220A01
 Sample No : WG1887347-2
 Channel :

Lab Number : L2408101
 Project Number : 045163
 Calibration Date : 02/20/24 08:43
 Init. Calib. Date(s) : 02/07/24 02/08/24
 Init. Calib. Times : 20:15 00:33

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	110	0
Dichlorodifluoromethane	0.309	0.151	-	51.1*	20	59	0
Chloromethane	0.428	0.293	-	31.5*	20	77	0
Vinyl chloride	40	32.022	-	19.9	20	100	0
Bromomethane	0.156	0.187	-	-19.9	20	140	0
Chloroethane	0.18	0.176	-	2.2	20	112	0
Trichlorofluoromethane	0.304	0.343	-	-12.8	20	135	0
Ethyl ether	0.14	0.124	-	11.4	20	98	0
1,1-Dichloroethene	0.224	0.246	-	-9.8	20	126	0
Carbon disulfide	0.855	0.83	-	2.9	20	115	0
Methylene chloride	0.302	0.288	-	4.6	20	108	0
Acetone	40	27.01	-	32.5*	20	78	0
trans-1,2-Dichloroethene	0.272	0.293	-	-7.7	20	121	0
Methyl tert-butyl ether	0.756	0.645	-	14.7	20	94	0
Diisopropyl ether	1.212	1.026	-	15.3	20	92	0
1,1-Dichloroethane	0.556	0.541	-	2.7	20	107	0
Ethyl tert-butyl ether	1.027	0.898	-	12.6	20	95	0
cis-1,2-Dichloroethene	0.318	0.323	-	-1.6	20	111	0
2,2-Dichloropropane	0.387	0.412	-	-6.5	20	120	0
Bromochloromethane	0.157	0.153	-	2.5	20	107	0
Chloroform	0.512	0.502	-	2	20	108	0
Carbon tetrachloride	40	40.218	-	-0.5	20	131	0
Tetrahydrofuran	0.098	0.057	-	41.8*	20	72	0
Dibromofluoromethane	0.262	0.251	-	4.2	20	106	0
1,1,1-Trichloroethane	0.397	0.45	-	-13.4	20	127	0
2-Butanone	0.133	0.082	-	38.3*	20	71	0
1,1-Dichloropropene	40	42.625	-	-6.6	20	127	0
Benzene	1.072	1.105	-	-3.1	20	113	0
tert-Amyl methyl ether	0.792	0.688	-	13.1	20	95	0
1,2-Dichloroethane-d4	0.27	0.226	-	16.3	20	94	0
1,2-Dichloroethane	0.394	0.339	-	14	20	94	0
Trichloroethene	0.28	0.309	-	-10.4	20	125	0
Dibromomethane	0.174	0.155	-	10.9	20	98	0
1,2-Dichloropropane	40	36.066	-	9.8	20	102	0
Bromodichloromethane	0.397	0.37	-	6.8	20	103	0
1,4-Dioxane	0.00235	0.0018*	-	23.4*	20	82	0
cis-1,3-Dichloropropene	0.451	0.431	-	4.4	20	100	0
Chlorobenzene-d5	1	1	-	0	20	113	0
Toluene-d8	1.396	1.279	-	8.4	20	103	0
Toluene	0.932	0.958	-	-2.8	20	118	0
4-Methyl-2-pentanone	0.138	0.096	-	30.4*	20	79	0
Tetrachloroethene	40	44.318	-	-10.8	20	145	0
trans-1,3-Dichloropropene	0.54	0.485	-	10.2	20	97	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : TUFTS STREET
 Instrument ID : VOA123
 Lab File ID : V23240220A01
 Sample No : WG1887347-2
 Channel :

Lab Number : L2408101
 Project Number : 045163
 Calibration Date : 02/20/24 08:43
 Init. Calib. Date(s) : 02/07/24 02/08/24
 Init. Calib. Times : 20:15 00:33

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,1,2-Trichloroethane	0.275	0.241	-	12.4	20	98	0
Chlorodibromomethane	0.395	0.379	-	4.1	20	104	0
1,3-Dichloropropane	0.545	0.481	-	11.7	20	98	0
1,2-Dibromoethane	0.319	0.293	-	8.2	20	99	0
2-Hexanone	0.252	0.16	-	36.5*	20	70	0
Chlorobenzene	1.067	1.103	-	-3.4	20	115	0
Ethylbenzene	1.731	1.809	-	-4.5	20	120	0
1,1,1,2-Tetrachloroethane	0.398	0.407	-	-2.3	20	111	0
p/m Xylene	0.662	0.726	-	-9.7	20	123	0
o Xylene	0.672	0.701	-	-4.3	20	117	0
Styrene	1.131	1.16	-	-2.6	20	111	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	118	0
Bromoform	0.48	0.417	-	13.1	20	99	0
Isopropylbenzene	3.164	3.336	-	-5.4	20	127	0
4-Bromofluorobenzene	0.931	0.808	-	13.2	20	102	0
Bromobenzene	0.906	0.896	-	1.1	20	115	0
n-Propylbenzene	3.676	3.809	-	-3.6	20	124	0
1,1,2,2-Tetrachloroethane	0.754	0.574	-	23.9*	20	89	0
2-Chlorotoluene	2.402	2.285	-	4.9	20	112	0
1,3,5-Trimethylbenzene	2.818	2.87	-	-1.8	20	122	0
1,2,3-Trichloropropane	0.583	0.442	-	24.2*	20	89	0
4-Chlorotoluene	2.419	2.368	-	2.1	20	115	0
tert-Butylbenzene	2.348	2.51	-	-6.9	20	129	0
1,2,4-Trimethylbenzene	2.842	2.822	-	0.7	20	118	0
sec-Butylbenzene	3.386	3.668	-	-8.3	20	131	0
p-Isopropyltoluene	3.043	3.301	-	-8.5	20	130	0
1,3-Dichlorobenzene	1.69	1.756	-	-3.9	20	122	0
1,4-Dichlorobenzene	1.71	1.758	-	-2.8	20	121	0
n-Butylbenzene	2.586	2.779	-	-7.5	20	131	0
1,2-Dichlorobenzene	1.614	1.609	-	0.3	20	116	0
1,2-Dibromo-3-chloropropan	0.129	0.095	-	26.4*	20	85	0
Hexachlorobutadiene	0.659	0.758	-	-15	20	146	0
1,2,4-Trichlorobenzene	1.16	1.263	-	-8.9	20	127	0
Naphthalene	2.342	2.227	-	4.9	20	109	0
1,2,3-Trichlorobenzene	1.043	1.076	-	-3.2	20	120	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : TUFTS STREET
 Instrument ID : VOA123
 Lab File ID : V23240221A02
 Sample No : WG1887734-2
 Channel :

Lab Number : L2408101
 Project Number : 045163
 Calibration Date : 02/21/24 08:39
 Init. Calib. Date(s) : 02/07/24 02/08/24
 Init. Calib. Times : 20:15 00:33

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	105	0
Dichlorodifluoromethane	0.309	0.127	-	58.9*	20	47	0
Chloromethane	0.428	0.282	-	34.1*	20	71	0
Vinyl chloride	40	30.093	-	24.8*	20	89	0
Bromomethane	0.156	0.169	-	-8.3	20	121	0
Chloroethane	0.18	0.171	-	5	20	103	0
Trichlorofluoromethane	0.304	0.321	-	-5.6	20	120	0
Ethyl ether	0.14	0.127	-	9.3	20	96	0
1,1-Dichloroethene	0.224	0.242	-	-8	20	118	0
Carbon disulfide	0.855	0.821	-	4	20	108	0
Freon-113	0.244	0.242	-	0.8	20	120	0
Acrolein	0.044	0.033	-	25*	20	84	0
Methylene chloride	0.302	0.291	-	3.6	20	104	0
Acetone	40	30.718	-	23.2*	20	83	0
trans-1,2-Dichloroethene	0.272	0.293	-	-7.7	20	115	0
Methyl acetate	0.2	0.145	-	27.5*	20	78	0
Methyl tert-butyl ether	0.756	0.667	-	11.8	20	93	0
tert-Butyl alcohol	0.029	0.02	-	31*	20	76	0
Diisopropyl ether	1.212	1.045	-	13.8	20	89	0
1,1-Dichloroethane	0.556	0.543	-	2.3	20	102	0
Halothane	0.203	0.23	-	-13.3	20	122	0
Acrylonitrile	0.09	0.068	-	24.4*	20	82	0
Ethyl tert-butyl ether	1.027	0.919	-	10.5	20	93	0
Vinyl acetate	0.698	0.603	-	13.6	20	86	0
cis-1,2-Dichloroethene	0.318	0.325	-	-2.2	20	107	0
2,2-Dichloropropane	0.387	0.405	-	-4.7	20	113	0
Bromochloromethane	0.157	0.154	-	1.9	20	103	0
Cyclohexane	0.505	0.476	-	5.7	20	113	0
Chloroform	0.512	0.505	-	1.4	20	104	0
Ethyl acetate	0.297	0.221	-	25.6*	20	78	0
Carbon tetrachloride	40	39.44	-	1.4	20	122	0
Tetrahydrofuran	0.098	0.062	-	36.7*	20	75	0
Dibromofluoromethane	0.262	0.252	-	3.8	20	101	0
1,1,1-Trichloroethane	0.397	0.443	-	-11.6	20	119	0
2-Butanone	0.133	0.09	-	32.3*	20	74	0
1,1-Dichloropropene	40	41.608	-	-4	20	118	0
Benzene	1.072	1.105	-	-3.1	20	107	0
tert-Amyl methyl ether	0.792	0.706	-	10.9	20	93	0
1,2-Dichloroethane-d4	0.27	0.226	-	16.3	20	89	0
1,2-Dichloroethane	0.394	0.347	-	11.9	20	92	0
Methyl cyclohexane	0.456	0.44	-	3.5	20	120	0
Trichloroethene	0.28	0.302	-	-7.9	20	116	0
Dibromomethane	0.174	0.16	-	8	20	96	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : TUFTS STREET
 Instrument ID : VOA123
 Lab File ID : V23240221A02
 Sample No : WG1887734-2
 Channel :

Lab Number : L2408101
 Project Number : 045163
 Calibration Date : 02/21/24 08:39
 Init. Calib. Date(s) : 02/07/24 02/08/24
 Init. Calib. Times : 20:15 00:33

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,2-Dichloropropane	40	36.624	-	8.4	20	98	0
Bromodichloromethane	0.397	0.382	-	3.8	20	101	0
1,4-Dioxane	0.00235	0.00213*	-	9.4	20	93	0
cis-1,3-Dichloropropene	0.451	0.438	-	2.9	20	97	0
Chlorobenzene-d5	1	1	-	0	20	109	0
Toluene-d8	1.396	1.265	-	9.4	20	99	0
Toluene	0.932	0.948	-	-1.7	20	113	0
4-Methyl-2-pentanone	0.138	0.101	-	26.8*	20	80	0
Tetrachloroethene	40	43.072	-	-7.7	20	136	0
trans-1,3-Dichloropropene	0.54	0.494	-	8.5	20	95	0
Ethyl methacrylate	0.412	0.338	-	18	20	88	0
1,1,2-Trichloroethane	0.275	0.247	-	10.2	20	97	0
Chlorodibromomethane	0.395	0.388	-	1.8	20	102	0
1,3-Dichloropropane	0.545	0.49	-	10.1	20	96	0
1,2-Dibromoethane	0.319	0.303	-	5	20	99	0
2-Hexanone	0.252	0.174	-	31*	20	73	0
Chlorobenzene	1.067	1.101	-	-3.2	20	111	0
Ethylbenzene	1.731	1.82	-	-5.1	20	117	0
1,1,1,2-Tetrachloroethane	0.398	0.414	-	-4	20	109	0
p/m Xylene	0.662	0.723	-	-9.2	20	118	0
o Xylene	0.672	0.701	-	-4.3	20	113	0
Styrene	1.131	1.144	-	-1.1	20	106	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	114	0
Bromoform	0.48	0.451	-	6	20	103	0
Isopropylbenzene	3.164	3.309	-	-4.6	20	122	0
4-Bromofluorobenzene	0.931	0.788	-	15.4	20	96	0
Bromobenzene	0.906	0.913	-	-0.8	20	113	0
n-Propylbenzene	3.676	3.856	-	-4.9	20	122	0
1,4-Dichlorobutane	1.133	0.895	-	21*	20	88	0
1,1,2,2-Tetrachloroethane	0.754	0.636	-	15.6	20	96	0
4-Ethyltoluene	3.23	3.405	-	-5.4	20	122	0
2-Chlorotoluene	2.402	2.275	-	5.3	20	108	0
1,3,5-Trimethylbenzene	2.818	2.899	-	-2.9	20	119	0
1,2,3-Trichloropropane	0.583	0.473	-	18.9	20	92	0
trans-1,4-Dichloro-2-buten	0.248	0.185	-	25.4*	20	84	0
4-Chlorotoluene	2.419	2.399	-	0.8	20	112	0
tert-Butylbenzene	2.348	2.504	-	-6.6	20	125	0
1,2,4-Trimethylbenzene	2.842	2.858	-	-0.6	20	115	0
sec-Butylbenzene	3.386	3.645	-	-7.6	20	126	0
p-Isopropyltoluene	3.043	3.318	-	-9	20	127	0
1,3-Dichlorobenzene	1.69	1.794	-	-6.2	20	121	0
1,4-Dichlorobenzene	1.71	1.787	-	-4.5	20	119	0
p-Diethylbenzene	1.89	2.073	-	-9.7	20	128	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : GEI Consultants
 Project Name : TUFTS STREET
 Instrument ID : VOA123
 Lab File ID : V23240221A02
 Sample No : WG1887734-2
 Channel :

Lab Number : L2408101
 Project Number : 045163
 Calibration Date : 02/21/24 08:39
 Init. Calib. Date(s) : 02/07/24 02/08/24
 Init. Calib. Times : 20:15 00:33

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
n-Butylbenzene	2.586	2.799	-	-8.2	20	128	0
1,2-Dichlorobenzene	1.614	1.655	-	-2.5	20	115	0
1,2,4,5-Tetramethylbenzene	3.095	3.243	-	-4.8	20	118	0
1,2-Dibromo-3-chloropropan	0.129	0.11	-	14.7	20	96	0
1,3,5-Trichlorobenzene	1.334	1.538	-	-15.3	20	133	0
Hexachlorobutadiene	0.659	0.762	-	-15.6	20	142	0
1,2,4-Trichlorobenzene	1.16	1.318	-	-13.6	20	129	0
Naphthalene	2.342	2.244	-	4.2	20	106	0
1,2,3-Trichlorobenzene	1.043	1.121	-	-7.5	20	121	0

* Value outside of QC limits.





ANALYTICAL REPORT

PREPARED FOR

Attn: Stephan Landry
Atlas Technical Consultants LLC
10 State St
Suite 100
Woburn, Massachusetts 01801

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JOB DESCRIPTION

Tufts Street Improvement - Somerville, M

JOB NUMBER

620-17450-1

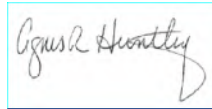
Eurofins New England

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



Authorized for release by
Agnes Huntley, Project Manager
Agnes.Huntley@et.eurofinsus.com
(401)372-3482

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Revision 1

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Definitions/Glossary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

MassDEP Analytical Protocol Certification Form

Laboratory Name: Eurofins New England

Project #: 620-17450-1

Project Location: Tufts Street Improvement - Somerville, M

RTN:

This Form provides certifications for the following data set: list Laboratory Sample ID Number(s):
620-17450-1 through 620-17450-18

 Matrices: ☒ Groundwater/Surface Water ☒ Soil/Sediment ☐ Drinking Water ☐ Air ☐ Other:

CAM Protocol (check all that apply below:)

8260 VOC CAM II A ☒	7470/7471 Hg CAM III B ☒	MassDEP VPH (GC/PID/FID) CAM IV A ☐	8082 PCB CAM V A ☒	9014 Total Cyanide/PAC CAM VI A ☐	6860 Perchlorate CAM VIII B ☐
8270 SVOC CAM II B ☒	7010 Metals CAM III C ☐	MassDEP VPH (GC/MS) CAM IV C ☐	8081 Pesticides CAM V B ☐	7196 Hex Cr CAM VI B ☐	MassDEP APH CAM IX A ☐
6010 Metals CAM III A ☒	6020 Metals CAM III D ☐	MassDEP EPH CAM IV B ☐	8151 Herbicides CAM V C ☐	8330 Explosives CAM VIII A ☐	TO-15 VOC CAM IX B ☐

Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	☒ Yes ☐ No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	☒ Yes ☐ No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	☒ Yes ☐ No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	☒ Yes ☐ No
E	VPH, EPH, APH, and TO-15 only a. VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	☐ Yes ☐ No ☐ Yes ☐ No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	☒ Yes ☐ No

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	☒ Yes ☐ No ¹
----------	---	--

Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.

H	Were all QC performance standards specified in the CAM protocol(s) achieved?	☐ Yes ☒ No ¹
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	☐ Yes ☒ No ¹

¹ All negative responses must be addressed in an attached laboratory narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, is accurate and complete.

 Signature: 

Position: Project Manager

Printed Name: Agnes Huntley

Date: 04/03/2024

Case Narrative

Client: Atlas Technical Consultants LLC
Project: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Job ID: 620-17450-1

Eurofins New England

Job Narrative 620-17450-1

REVISION

The report being provided is a revision of the original report sent on 3/28/2024. The report (revision 1) is being revised due to Report revised as client needed full list 8270 with low-level PAHs.

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 3/18/2024 3:25 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.4°C.

GC/MS VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC/MS Semi VOA

Method 8270MCP: The following analytes have been identified, in the reference method and/or via historical data, to be poor and/or erratic performers: Benzidine and Benzoic acid. These analytes may have a %D >50%.

Method 8270MCP: The laboratory control sample (LCS) for preparation batch 620-32927 and analytical batch 620-32951 recovered outside control limits for the following analytes: 4-Chloroaniline, Aniline, Benzidine, Benzoic acid and Pyridine. The affected target analytes recovered within acceptance limits, >10%, per MCP criteria therefore, demonstrates the analytical system had sufficient sensitivity to detect the compounds had they been present. Since the affected target compounds were not detected in the samples, the data have been reported and qualified.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC Semi VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

PCBs

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals

Method 6010MCP: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 620-33090 and analytical batch 620-33178 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 6010MCP: The sample duplicate (DUP) precision for preparation batch 620-33090 and analytical batch 620-33178 was outside control limits. Sample non-homogeneity is suspected.

Method 6010MCP: The matrix spike / matrix spike duplicate / sample duplicate (MS/MSD/DUP) precision for preparation batch 620-33090 and analytical batch 620-33178 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) precision was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins New England

Case Narrative

Client: Atlas Technical Consultants LLC
Project: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Job ID: 620-17450-1 (Continued)

Eurofins New England

General Chemistry

Method 1010A: The Pensky Martens closed cup apparatus is designed to determine the flash point of a liquid sample. The sample submitted could not be mixed well enough to obtain uniform heating. The temperature being measured was that of the material near the top of the cup. The material at the bottom of the cup could have a higher temperature. The temperature reported may not be accurate.

Method Moisture: The sample duplicate (DUP) precision for analytical batch 620-32837 was outside control limits. Sample non-homogeneity is suspected.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins New England

Detection Summary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-3 (0-5)

Lab Sample ID: 620-17450-1

No Detections.

Client Sample ID: ATC-3 (5-10)

Lab Sample ID: 620-17450-2

No Detections.

Client Sample ID: ATC-2 (0-5)

Lab Sample ID: 620-17450-3

No Detections.

Client Sample ID: ATC-2 (5-10)

Lab Sample ID: 620-17450-4

No Detections.

Client Sample ID: ATC-1 (0-5)

Lab Sample ID: 620-17450-5

No Detections.

Client Sample ID: ATC-1 (5-10)

Lab Sample ID: 620-17450-6

No Detections.

Client Sample ID: Comp (0-5)

Lab Sample ID: 620-17450-7

Analyte	Result	Qualifier	RL	Unit	Dil	Fac	D	Method	Prep Type
Acenaphthylene	28.7		17.8	ug/Kg	1	✱		8270D_LL_PAH	Total/NA
Anthracene	33.8		17.8	ug/Kg	1	✱		8270D_LL_PAH	Total/NA
Benzo[a]anthracene	148		17.8	ug/Kg	1	✱		8270D_LL_PAH	Total/NA
Benzo[a]pyrene	175		17.8	ug/Kg	1	✱		8270D_LL_PAH	Total/NA
Benzo[b]fluoranthene	179		17.8	ug/Kg	1	✱		8270D_LL_PAH	Total/NA
Benzo[g,h,i]perylene	136		17.8	ug/Kg	1	✱		8270D_LL_PAH	Total/NA
Benzo[k]fluoranthene	165		17.8	ug/Kg	1	✱		8270D_LL_PAH	Total/NA
Chrysene	156		17.8	ug/Kg	1	✱		8270D_LL_PAH	Total/NA
Dibenz(a,h)anthracene	41.0		17.8	ug/Kg	1	✱		8270D_LL_PAH	Total/NA
Fluoranthene	256		17.8	ug/Kg	1	✱		8270D_LL_PAH	Total/NA
Indeno[1,2,3-cd]pyrene	112		17.8	ug/Kg	1	✱		8270D_LL_PAH	Total/NA
Phenanthrene	102		17.8	ug/Kg	1	✱		8270D_LL_PAH	Total/NA
Pyrene	259		17.8	ug/Kg	1	✱		8270D_LL_PAH	Total/NA
Bis(2-ethylhexyl) phthalate	50.8		17.8	ug/Kg	1	✱		8270D_LL_PAH	Total/NA
TEPH (C9-C36)	90.2		15.2	mg/Kg	1	✱		8100	Total/NA
Barium	45.9		2.10	mg/Kg	2	✱		6010D	Total/NA
Chromium	13.6	F1	2.10	mg/Kg	2	✱		6010D	Total/NA
Lead	21.0		3.15	mg/Kg	2	✱		6010D	Total/NA
Flashpoint	>184		50.0	Degrees F	1			1010A	Total/NA
Total Organic Carbon	4780	F1	300	mg/Kg	1			9060	Total/NA
pH	8.4			SU	1			9045D	Soluble
Temperature	23.4			Degrees C	1			9045D	Soluble
Specific Conductance	1200		10.0	uS/cm	1			SM 2510B	Soluble

Client Sample ID: Comp (5-10)

Lab Sample ID: 620-17450-8

Analyte	Result	Qualifier	RL	Unit	Dil	Fac	D	Method	Prep Type
TEPH (C9-C36)	16.7		14.9	mg/Kg	1	✱		8100	Total/NA
Arsenic	3.60		2.88	mg/Kg	2	✱		6010D	Total/NA
Barium	39.3		1.92	mg/Kg	2	✱		6010D	Total/NA
Chromium	17.4		1.92	mg/Kg	2	✱		6010D	Total/NA
Lead	5.34		2.88	mg/Kg	2	✱		6010D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins New England

Detection Summary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: Comp (5-10) (Continued)

Lab Sample ID: 620-17450-8

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Flashpoint	>170		50.0	Degrees F	1		1010A	Total/NA
Total Organic Carbon	1620		300	mg/Kg	1		9060	Total/NA
pH	7.9			SU	1		9045D	Soluble
Temperature	23.4			Degrees C	1		9045D	Soluble
Specific Conductance	601		10.0	uS/cm	1		SM 2510B	Soluble

Client Sample ID: ATC-8 (0-5)

Lab Sample ID: 620-17450-9

No Detections.

Client Sample ID: ATC-8 (5-10)

Lab Sample ID: 620-17450-10

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	13.4		4.94	ug/Kg	1	✱	8260C	Total/NA

Client Sample ID: ATC-7 (0-5)

Lab Sample ID: 620-17450-11

No Detections.

Client Sample ID: ATC-7 (5-10)

Lab Sample ID: 620-17450-12

No Detections.

Client Sample ID: ATC-6 (0-5)

Lab Sample ID: 620-17450-13

No Detections.

Client Sample ID: ATC-6 (5-10)

Lab Sample ID: 620-17450-14

No Detections.

Client Sample ID: ATC-4 (0-5)

Lab Sample ID: 620-17450-15

No Detections.

Client Sample ID: ATC-4 (5-10)

Lab Sample ID: 620-17450-16

No Detections.

Client Sample ID: ATC-5 (0-5)

Lab Sample ID: 620-17450-17

No Detections.

Client Sample ID: ATC-5 (5-10)

Lab Sample ID: 620-17450-18

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-3 (0-5)

Lab Sample ID: 620-17450-1

Date Collected: 03/15/24 09:10

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 88.2

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Acetone	ND		98.4	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Acrylonitrile	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Benzene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Bromobenzene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Bromochloromethane	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Bromodichloromethane	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Bromoform	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Bromomethane	ND		19.7	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
2-Butanone (MEK)	ND		19.7	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
n-Butylbenzene	ND		19.7	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
sec-Butylbenzene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
tert-Butylbenzene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Carbon disulfide	ND		19.7	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Carbon tetrachloride	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Chlorobenzene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Chloroethane	ND		19.7	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Chloroform	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Chloromethane	ND		19.7	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
2-Chlorotoluene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
4-Chlorotoluene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
1,2-Dibromo-3-Chloropropane	ND		19.7	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Dibromochloromethane	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
1,2-Dibromoethane (EDB)	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Dibromomethane	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
1,2-Dichlorobenzene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
1,3-Dichlorobenzene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
1,4-Dichlorobenzene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Dichlorodifluoromethane (Freon 12)	ND		19.7	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
1,1-Dichloroethane	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
1,2-Dichloroethane	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
1,1-Dichloroethene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
cis-1,2-Dichloroethene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
trans-1,2-Dichloroethene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
1,2-Dichloropropane	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
1,3-Dichloropropane	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
2,2-Dichloropropane	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
1,1-Dichloropropene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
cis-1,3-Dichloropropene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
trans-1,3-Dichloropropene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Ethylbenzene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Hexachlorobutadiene	ND		19.7	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
2-Hexanone (MBK)	ND		19.7	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Isopropylbenzene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
4-Isopropyltoluene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Methyl tert-butyl ether	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
4-Methyl-2-pentanone (MIBK)	ND		19.7	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Methylene Chloride	ND		19.7	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1
Naphthalene	ND		9.84	ug/Kg	☆	03/26/24 07:37	03/26/24 12:08	1

Euofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-3 (0-5)

Lab Sample ID: 620-17450-1

Date Collected: 03/15/24 09:10

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 88.2

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
Styrene	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
1,1,1,2-Tetrachloroethane	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
1,1,2,2-Tetrachloroethane	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
Tetrachloroethene	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
Toluene	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
1,2,3-Trichlorobenzene	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
1,2,4-Trichlorobenzene	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
1,3,5-Trichlorobenzene	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
1,1,1-Trichloroethane	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
1,1,2-Trichloroethane	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
Trichloroethene	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
Trichlorofluoromethane (Freon 11)	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
1,2,3-Trichloropropane	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
1,2,4-Trimethylbenzene	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
1,3,5-Trimethylbenzene	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
Vinyl chloride	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
m,p-Xylene	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
o-Xylene	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
Tetrahydrofuran	ND		19.7	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
Ethyl ether	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
Tert-amyl methyl ether	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
Ethyl tert-butyl ether	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
di-Isopropyl ether	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
tert-Butanol	ND		197	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
1,4-Dioxane	ND		197	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
trans-1,4-Dichloro-2-butene	ND		49.2	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
Ethanol	ND		1970	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
1,3-Dichloropropene, Total	ND		9.84	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1
Xylenes, Total	ND		29.5	ug/Kg	✱	03/26/24 07:37	03/26/24 12:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	03/26/24 07:37	03/26/24 12:08	1
Toluene-d8 (Surr)	97		70 - 130	03/26/24 07:37	03/26/24 12:08	1
1,2-Dichloroethane-d4 (Surr)	99		70 - 130	03/26/24 07:37	03/26/24 12:08	1
Dibromofluoromethane (Surr)	97		70 - 130	03/26/24 07:37	03/26/24 12:08	1

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-3 (5-10)

Lab Sample ID: 620-17450-2

Date Collected: 03/15/24 09:30

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 87.3

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Acetone	ND		51.6	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Acrylonitrile	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Benzene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Bromobenzene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Bromochloromethane	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Bromodichloromethane	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Bromoform	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Bromomethane	ND		10.3	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
2-Butanone (MEK)	ND		10.3	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
n-Butylbenzene	ND		10.3	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
sec-Butylbenzene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
tert-Butylbenzene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Carbon disulfide	ND		10.3	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Carbon tetrachloride	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Chlorobenzene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Chloroethane	ND		10.3	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Chloroform	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Chloromethane	ND		10.3	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
2-Chlorotoluene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
4-Chlorotoluene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
1,2-Dibromo-3-Chloropropane	ND		10.3	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Dibromochloromethane	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
1,2-Dibromoethane (EDB)	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Dibromomethane	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
1,2-Dichlorobenzene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
1,3-Dichlorobenzene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
1,4-Dichlorobenzene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Dichlorodifluoromethane (Freon 12)	ND		10.3	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
1,1-Dichloroethane	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
1,2-Dichloroethane	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
1,1-Dichloroethene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
cis-1,2-Dichloroethene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
trans-1,2-Dichloroethene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
1,2-Dichloropropane	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
1,3-Dichloropropane	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
2,2-Dichloropropane	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
1,1-Dichloropropene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
cis-1,3-Dichloropropene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
trans-1,3-Dichloropropene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Ethylbenzene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Hexachlorobutadiene	ND		10.3	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
2-Hexanone (MBK)	ND		10.3	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Isopropylbenzene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
4-Isopropyltoluene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Methyl tert-butyl ether	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
4-Methyl-2-pentanone (MIBK)	ND		10.3	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Methylene Chloride	ND		10.3	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1
Naphthalene	ND		5.16	ug/Kg	☆	03/26/24 07:37	03/26/24 12:33	1

Euofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-3 (5-10)

Lab Sample ID: 620-17450-2

Date Collected: 03/15/24 09:30

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 87.3

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
Styrene	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
1,1,1,2-Tetrachloroethane	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
1,1,2,2-Tetrachloroethane	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
Tetrachloroethene	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
Toluene	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
1,2,3-Trichlorobenzene	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
1,2,4-Trichlorobenzene	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
1,3,5-Trichlorobenzene	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
1,1,1-Trichloroethane	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
1,1,2-Trichloroethane	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
Trichloroethene	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
Trichlorofluoromethane (Freon 11)	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
1,2,3-Trichloropropane	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
1,2,4-Trimethylbenzene	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
1,3,5-Trimethylbenzene	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
Vinyl chloride	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
m,p-Xylene	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
o-Xylene	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
Tetrahydrofuran	ND		10.3	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
Ethyl ether	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
Tert-amyl methyl ether	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
Ethyl tert-butyl ether	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
di-Isopropyl ether	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
tert-Butanol	ND		103	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
1,4-Dioxane	ND		103	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
trans-1,4-Dichloro-2-butene	ND		25.8	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
Ethanol	ND		1030	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
1,3-Dichloropropene, Total	ND		5.16	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1
Xylenes, Total	ND		15.5	ug/Kg	✱	03/26/24 07:37	03/26/24 12:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	03/26/24 07:37	03/26/24 12:33	1
Toluene-d8 (Surr)	98		70 - 130	03/26/24 07:37	03/26/24 12:33	1
1,2-Dichloroethane-d4 (Surr)	100		70 - 130	03/26/24 07:37	03/26/24 12:33	1
Dibromofluoromethane (Surr)	100		70 - 130	03/26/24 07:37	03/26/24 12:33	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-2 (0-5)

Lab Sample ID: 620-17450-3

Date Collected: 03/15/24 10:15

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 90.6

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Acetone	ND		54.6	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Acrylonitrile	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Benzene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Bromobenzene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Bromochloromethane	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Bromodichloromethane	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Bromoform	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Bromomethane	ND		10.9	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
2-Butanone (MEK)	ND		10.9	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
n-Butylbenzene	ND		10.9	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
sec-Butylbenzene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
tert-Butylbenzene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Carbon disulfide	ND		10.9	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Carbon tetrachloride	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Chlorobenzene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Chloroethane	ND		10.9	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Chloroform	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Chloromethane	ND		10.9	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
2-Chlorotoluene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
4-Chlorotoluene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
1,2-Dibromo-3-Chloropropane	ND		10.9	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Dibromochloromethane	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
1,2-Dibromoethane (EDB)	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Dibromomethane	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
1,2-Dichlorobenzene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
1,3-Dichlorobenzene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
1,4-Dichlorobenzene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Dichlorodifluoromethane (Freon 12)	ND		10.9	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
1,1-Dichloroethane	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
1,2-Dichloroethane	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
1,1-Dichloroethene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
cis-1,2-Dichloroethene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
trans-1,2-Dichloroethene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
1,2-Dichloropropane	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
1,3-Dichloropropane	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
2,2-Dichloropropane	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
1,1-Dichloropropene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
cis-1,3-Dichloropropene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
trans-1,3-Dichloropropene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Ethylbenzene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Hexachlorobutadiene	ND		10.9	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
2-Hexanone (MBK)	ND		10.9	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Isopropylbenzene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
4-Isopropyltoluene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Methyl tert-butyl ether	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
4-Methyl-2-pentanone (MIBK)	ND		10.9	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Methylene Chloride	ND		10.9	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1
Naphthalene	ND		5.46	ug/Kg	☆	03/26/24 07:37	03/26/24 12:58	1

Euofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-2 (0-5)

Lab Sample ID: 620-17450-3

Date Collected: 03/15/24 10:15

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 90.6

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
Styrene	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
1,1,1,2-Tetrachloroethane	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
1,1,2,2-Tetrachloroethane	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
Tetrachloroethene	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
Toluene	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
1,2,3-Trichlorobenzene	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
1,2,4-Trichlorobenzene	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
1,3,5-Trichlorobenzene	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
1,1,1-Trichloroethane	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
1,1,2-Trichloroethane	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
Trichloroethene	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
Trichlorofluoromethane (Freon 11)	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
1,2,3-Trichloropropane	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
1,2,4-Trimethylbenzene	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
1,3,5-Trimethylbenzene	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
Vinyl chloride	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
m,p-Xylene	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
o-Xylene	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
Tetrahydrofuran	ND		10.9	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
Ethyl ether	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
Tert-amyl methyl ether	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
Ethyl tert-butyl ether	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
di-Isopropyl ether	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
tert-Butanol	ND		109	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
1,4-Dioxane	ND		109	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
trans-1,4-Dichloro-2-butene	ND		27.3	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
Ethanol	ND		1090	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
1,3-Dichloropropene, Total	ND		5.46	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1
Xylenes, Total	ND		16.4	ug/Kg	✱	03/26/24 07:37	03/26/24 12:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	03/26/24 07:37	03/26/24 12:58	1
Toluene-d8 (Surr)	97		70 - 130	03/26/24 07:37	03/26/24 12:58	1
1,2-Dichloroethane-d4 (Surr)	100		70 - 130	03/26/24 07:37	03/26/24 12:58	1
Dibromofluoromethane (Surr)	100		70 - 130	03/26/24 07:37	03/26/24 12:58	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-2 (5-10)

Lab Sample ID: 620-17450-4

Date Collected: 03/15/24 11:00

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 77.8

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Acetone	ND		64.1	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Acrylonitrile	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Benzene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Bromobenzene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Bromochloromethane	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Bromodichloromethane	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Bromoform	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Bromomethane	ND		12.8	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
2-Butanone (MEK)	ND		12.8	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
n-Butylbenzene	ND		12.8	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
sec-Butylbenzene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
tert-Butylbenzene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Carbon disulfide	ND		12.8	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Carbon tetrachloride	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Chlorobenzene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Chloroethane	ND		12.8	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Chloroform	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Chloromethane	ND		12.8	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
2-Chlorotoluene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
4-Chlorotoluene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
1,2-Dibromo-3-Chloropropane	ND		12.8	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Dibromochloromethane	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
1,2-Dibromoethane (EDB)	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Dibromomethane	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
1,2-Dichlorobenzene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
1,3-Dichlorobenzene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
1,4-Dichlorobenzene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Dichlorodifluoromethane (Freon 12)	ND		12.8	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
1,1-Dichloroethane	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
1,2-Dichloroethane	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
1,1-Dichloroethene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
cis-1,2-Dichloroethene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
trans-1,2-Dichloroethene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
1,2-Dichloropropane	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
1,3-Dichloropropane	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
2,2-Dichloropropane	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
1,1-Dichloropropene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
cis-1,3-Dichloropropene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
trans-1,3-Dichloropropene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Ethylbenzene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Hexachlorobutadiene	ND		12.8	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
2-Hexanone (MBK)	ND		12.8	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Isopropylbenzene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
4-Isopropyltoluene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Methyl tert-butyl ether	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
4-Methyl-2-pentanone (MIBK)	ND		12.8	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Methylene Chloride	ND		12.8	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1
Naphthalene	ND		6.41	ug/Kg	☆	03/26/24 07:37	03/26/24 13:23	1

Euofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-2 (5-10)

Lab Sample ID: 620-17450-4

Date Collected: 03/15/24 11:00

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 77.8

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
Styrene	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
1,1,1,2-Tetrachloroethane	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
1,1,2,2-Tetrachloroethane	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
Tetrachloroethene	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
Toluene	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
1,2,3-Trichlorobenzene	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
1,2,4-Trichlorobenzene	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
1,3,5-Trichlorobenzene	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
1,1,1-Trichloroethane	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
1,1,2-Trichloroethane	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
Trichloroethene	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
Trichlorofluoromethane (Freon 11)	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
1,2,3-Trichloropropane	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
1,2,4-Trimethylbenzene	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
1,3,5-Trimethylbenzene	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
Vinyl chloride	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
m,p-Xylene	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
o-Xylene	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
Tetrahydrofuran	ND		12.8	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
Ethyl ether	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
Tert-amyl methyl ether	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
Ethyl tert-butyl ether	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
di-Isopropyl ether	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
tert-Butanol	ND		128	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
1,4-Dioxane	ND		128	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
trans-1,4-Dichloro-2-butene	ND		32.1	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
Ethanol	ND		1280	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
1,3-Dichloropropene, Total	ND		6.41	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1
Xylenes, Total	ND		19.2	ug/Kg	✱	03/26/24 07:37	03/26/24 13:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	03/26/24 07:37	03/26/24 13:23	1
Toluene-d8 (Surr)	99		70 - 130	03/26/24 07:37	03/26/24 13:23	1
1,2-Dichloroethane-d4 (Surr)	113		70 - 130	03/26/24 07:37	03/26/24 13:23	1
Dibromofluoromethane (Surr)	105		70 - 130	03/26/24 07:37	03/26/24 13:23	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-1 (0-5)

Lab Sample ID: 620-17450-5

Date Collected: 03/15/24 11:20

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 88.8

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Acetone	ND		46.9	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Acrylonitrile	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Benzene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Bromobenzene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Bromochloromethane	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Bromodichloromethane	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Bromoform	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Bromomethane	ND		9.38	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
2-Butanone (MEK)	ND		9.38	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
n-Butylbenzene	ND		9.38	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
sec-Butylbenzene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
tert-Butylbenzene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Carbon disulfide	ND		9.38	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Carbon tetrachloride	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Chlorobenzene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Chloroethane	ND		9.38	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Chloroform	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Chloromethane	ND		9.38	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
2-Chlorotoluene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
4-Chlorotoluene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
1,2-Dibromo-3-Chloropropane	ND		9.38	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Dibromochloromethane	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
1,2-Dibromoethane (EDB)	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Dibromomethane	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
1,2-Dichlorobenzene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
1,3-Dichlorobenzene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
1,4-Dichlorobenzene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Dichlorodifluoromethane (Freon 12)	ND		9.38	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
1,1-Dichloroethane	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
1,2-Dichloroethane	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
1,1-Dichloroethene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
cis-1,2-Dichloroethene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
trans-1,2-Dichloroethene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
1,2-Dichloropropane	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
1,3-Dichloropropane	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
2,2-Dichloropropane	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
1,1-Dichloropropene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
cis-1,3-Dichloropropene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
trans-1,3-Dichloropropene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Ethylbenzene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Hexachlorobutadiene	ND		9.38	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
2-Hexanone (MBK)	ND		9.38	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Isopropylbenzene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
4-Isopropyltoluene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Methyl tert-butyl ether	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
4-Methyl-2-pentanone (MIBK)	ND		9.38	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Methylene Chloride	ND		9.38	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1
Naphthalene	ND		4.69	ug/Kg	☆	03/26/24 07:37	03/26/24 13:49	1

Euofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-1 (0-5)

Lab Sample ID: 620-17450-5

Date Collected: 03/15/24 11:20

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 88.8

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
Styrene	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
1,1,1,2-Tetrachloroethane	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
1,1,2,2-Tetrachloroethane	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
Tetrachloroethene	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
Toluene	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
1,2,3-Trichlorobenzene	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
1,2,4-Trichlorobenzene	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
1,3,5-Trichlorobenzene	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
1,1,1-Trichloroethane	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
1,1,2-Trichloroethane	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
Trichloroethene	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
Trichlorofluoromethane (Freon 11)	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
1,2,3-Trichloropropane	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
1,2,4-Trimethylbenzene	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
1,3,5-Trimethylbenzene	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
Vinyl chloride	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
m,p-Xylene	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
o-Xylene	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
Tetrahydrofuran	ND		9.38	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
Ethyl ether	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
Tert-amyl methyl ether	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
Ethyl tert-butyl ether	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
di-Isopropyl ether	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
tert-Butanol	ND		93.8	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
1,4-Dioxane	ND		93.8	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
trans-1,4-Dichloro-2-butene	ND		23.5	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
Ethanol	ND		938	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
1,3-Dichloropropene, Total	ND		4.69	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1
Xylenes, Total	ND		14.1	ug/Kg	✱	03/26/24 07:37	03/26/24 13:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	03/26/24 07:37	03/26/24 13:49	1
Toluene-d8 (Surr)	99		70 - 130	03/26/24 07:37	03/26/24 13:49	1
1,2-Dichloroethane-d4 (Surr)	101		70 - 130	03/26/24 07:37	03/26/24 13:49	1
Dibromofluoromethane (Surr)	100		70 - 130	03/26/24 07:37	03/26/24 13:49	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-1 (5-10)

Lab Sample ID: 620-17450-6

Date Collected: 03/15/24 11:30

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 91.4

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Acetone	ND		53.2	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Acrylonitrile	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Benzene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Bromobenzene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Bromochloromethane	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Bromodichloromethane	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Bromoform	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Bromomethane	ND		10.6	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
2-Butanone (MEK)	ND		10.6	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
n-Butylbenzene	ND		10.6	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
sec-Butylbenzene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
tert-Butylbenzene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Carbon disulfide	ND		10.6	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Carbon tetrachloride	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Chlorobenzene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Chloroethane	ND		10.6	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Chloroform	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Chloromethane	ND		10.6	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
2-Chlorotoluene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
4-Chlorotoluene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
1,2-Dibromo-3-Chloropropane	ND		10.6	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Dibromochloromethane	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
1,2-Dibromoethane (EDB)	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Dibromomethane	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
1,2-Dichlorobenzene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
1,3-Dichlorobenzene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
1,4-Dichlorobenzene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Dichlorodifluoromethane (Freon 12)	ND		10.6	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
1,1-Dichloroethane	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
1,2-Dichloroethane	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
1,1-Dichloroethene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
cis-1,2-Dichloroethene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
trans-1,2-Dichloroethene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
1,2-Dichloropropane	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
1,3-Dichloropropane	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
2,2-Dichloropropane	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
1,1-Dichloropropene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
cis-1,3-Dichloropropene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
trans-1,3-Dichloropropene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Ethylbenzene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Hexachlorobutadiene	ND		10.6	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
2-Hexanone (MBK)	ND		10.6	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Isopropylbenzene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
4-Isopropyltoluene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Methyl tert-butyl ether	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
4-Methyl-2-pentanone (MIBK)	ND		10.6	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Methylene Chloride	ND		10.6	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1
Naphthalene	ND		5.32	ug/Kg	☆	03/26/24 07:37	03/26/24 14:14	1

Euofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-1 (5-10)

Lab Sample ID: 620-17450-6

Date Collected: 03/15/24 11:30

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 91.4

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
Styrene	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
1,1,1,2-Tetrachloroethane	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
1,1,2,2-Tetrachloroethane	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
Tetrachloroethene	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
Toluene	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
1,2,3-Trichlorobenzene	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
1,2,4-Trichlorobenzene	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
1,3,5-Trichlorobenzene	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
1,1,1-Trichloroethane	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
1,1,2-Trichloroethane	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
Trichloroethene	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
Trichlorofluoromethane (Freon 11)	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
1,2,3-Trichloropropane	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
1,2,4-Trimethylbenzene	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
1,3,5-Trimethylbenzene	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
Vinyl chloride	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
m,p-Xylene	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
o-Xylene	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
Tetrahydrofuran	ND		10.6	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
Ethyl ether	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
Tert-amyl methyl ether	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
Ethyl tert-butyl ether	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
di-Isopropyl ether	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
tert-Butanol	ND		106	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
1,4-Dioxane	ND		106	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
trans-1,4-Dichloro-2-butene	ND		26.6	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
Ethanol	ND		1060	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
1,3-Dichloropropene, Total	ND		5.32	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1
Xylenes, Total	ND		16.0	ug/Kg	✱	03/26/24 07:37	03/26/24 14:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	03/26/24 07:37	03/26/24 14:14	1
Toluene-d8 (Surr)	99		70 - 130	03/26/24 07:37	03/26/24 14:14	1
1,2-Dichloroethane-d4 (Surr)	101		70 - 130	03/26/24 07:37	03/26/24 14:14	1
Dibromofluoromethane (Surr)	101		70 - 130	03/26/24 07:37	03/26/24 14:14	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: Comp (0-5)

Lab Sample ID: 620-17450-7

Date Collected: 03/15/24 12:00

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 87.7

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Acenaphthylene	28.7		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
1-Methylnaphthalene	ND		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Anthracene	33.8		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Benzo[a]anthracene	148		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Benzo[a]pyrene	175		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Benzo[b]fluoranthene	179		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Benzo[g,h,i]perylene	136		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Benzo[k]fluoranthene	165		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Chrysene	156		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Dibenz(a,h)anthracene	41.0		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Fluoranthene	256		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Fluorene	ND		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Indeno[1,2,3-cd]pyrene	112		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
2-Methylnaphthalene	ND		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Naphthalene	ND		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Phenanthrene	102		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Pyrene	259		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Bis(2-ethylhexyl) phthalate	50.8		17.8	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	43		30 - 130	03/21/24 08:36	03/21/24 15:49	1
Terphenyl-d14 (Surr)	76		30 - 130	03/21/24 08:36	03/21/24 15:49	1
2-Fluorobiphenyl (Surr)	51		30 - 130	03/21/24 08:36	03/21/24 15:49	1

Method: MA DEP 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
1,2,4-Trichlorobenzene	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
1,2-Dichlorobenzene	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
1,3-Dichlorobenzene	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
1,4-Dichlorobenzene	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
2,4,5-Trichlorophenol	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
2,4,6-Trichlorophenol	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
2,4-Dichlorophenol	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
2,4-Dimethylphenol	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
2,4-Dinitrophenol	ND		733	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
2,4-Dinitrotoluene	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
2,6-Dinitrotoluene	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
2-Chloronaphthalene	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
2-Chlorophenol	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
2-Methylphenol	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
2-Nitroaniline	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
2-Nitrophenol	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
3 & 4 Methylphenol	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
3,3'-Dichlorobenzidine	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
3-Nitroaniline	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
4,6-Dinitro-2-methylphenol	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
4-Bromophenyl phenyl ether	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
4-Chloro-3-methylphenol	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: Comp (0-5)

Lab Sample ID: 620-17450-7

Date Collected: 03/15/24 12:00

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 87.7

Method: MA DEP 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chloroaniline	ND	*-	185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
4-Chlorophenyl phenyl ether	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
4-Nitroaniline	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
4-Nitrophenol	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Acetophenone	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Aniline	ND	*-	366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Azobenzene/Diphenyldiazene	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Benzidine	ND	*-	733	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Benzoic acid	ND	*-	740	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Benzyl alcohol	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Bis(2-chloroethoxy)methane	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Bis(2-chloroethyl)ether	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
bis (2-chloroisopropyl) ether	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Bis(2-ethylhexyl) phthalate	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Butyl benzyl phthalate	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Carbazole	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Dibenzofuran	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Diethyl phthalate	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Dimethyl phthalate	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Di-n-butyl phthalate	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Di-n-octyl phthalate	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Hexachlorobenzene	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Hexachlorobutadiene	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Hexachlorocyclopentadiene	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Hexachloroethane	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Isophorone	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Nitrobenzene	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
N-Nitrosodimethylamine	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
N-Nitrosodi-n-propylamine	ND		185	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
N-Nitrosodiphenylamine	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Pentachloronitrobenzene	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Pentachlorophenol	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Phenol	ND		366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1
Pyridine	ND	*-	366	ug/Kg	☆	03/21/24 08:36	03/21/24 15:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	50		30 - 130	03/21/24 08:36	03/21/24 15:49	1
2-Fluorophenol (Surr)	50		15 - 110	03/21/24 08:36	03/21/24 15:49	1
Nitrobenzene-d5 (Surr)	39		30 - 130	03/21/24 08:36	03/21/24 15:49	1
Phenol-d5 (Surr)	54		15 - 110	03/21/24 08:36	03/21/24 15:49	1
2,4,6-Tribromophenol (Surr)	63		15 - 110	03/21/24 08:36	03/21/24 15:49	1
Terphenyl-d14 (Surr)	76		30 - 130	03/21/24 08:36	03/21/24 15:49	1

Method: MA DEP 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		21.9	ug/Kg	☆	03/19/24 14:48	03/21/24 23:56	1
PCB-1221	ND		21.9	ug/Kg	☆	03/19/24 14:48	03/21/24 23:56	1
PCB-1232	ND		21.9	ug/Kg	☆	03/19/24 14:48	03/21/24 23:56	1
PCB-1242	ND		21.9	ug/Kg	☆	03/19/24 14:48	03/21/24 23:56	1
PCB-1248	ND		21.9	ug/Kg	☆	03/19/24 14:48	03/21/24 23:56	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: Comp (0-5)

Lab Sample ID: 620-17450-7

Date Collected: 03/15/24 12:00

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 87.7

Method: MA DEP 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1254	ND		21.9	ug/Kg	☆	03/19/24 14:48	03/21/24 23:56	1
PCB-1262	ND		21.9	ug/Kg	☆	03/19/24 14:48	03/21/24 23:56	1
PCB-1260	ND		21.9	ug/Kg	☆	03/19/24 14:48	03/21/24 23:56	1
PCB-1268	ND		21.9	ug/Kg	☆	03/19/24 14:48	03/21/24 23:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	73		30 - 150			03/19/24 14:48	03/21/24 23:56	1
DCB Decachlorobiphenyl (Surr)	88		30 - 150			03/19/24 14:48	03/21/24 23:56	1

Method: SW846 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TEPH (C9-C36)	90.2		15.2	mg/Kg	☆	03/19/24 17:07	03/21/24 15:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctadecane (Surr)	100		40 - 140			03/19/24 17:07	03/21/24 15:35	1
o-Terphenyl (Surr)	72		40 - 140			03/19/24 17:07	03/21/24 15:35	1

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND	F1	3.15	mg/Kg	☆	03/26/24 08:24	03/27/24 14:54	2
Barium	45.9		2.10	mg/Kg	☆	03/26/24 08:24	03/27/24 14:54	2
Cadmium	ND		1.05	mg/Kg	☆	03/26/24 08:24	03/27/24 14:54	2
Chromium	13.6	F1	2.10	mg/Kg	☆	03/26/24 08:24	03/27/24 14:54	2
Lead	21.0		3.15	mg/Kg	☆	03/26/24 08:24	03/27/24 14:54	2
Selenium	ND	F1	3.15	mg/Kg	☆	03/26/24 08:24	03/27/24 14:54	2
Silver	ND	F1	3.15	mg/Kg	☆	03/26/24 08:24	03/27/24 14:54	2

Method: SW846 6010D - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0150	mg/L		03/26/24 15:40	03/27/24 13:47	1

Method: SW846 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0530	mg/Kg	☆	03/19/24 11:28	03/19/24 15:44	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Flashpoint (SW846 1010A)	>184		50.0	Degrees F			03/21/24 10:01	1
Cyanide, Reactive (SW846 9012)	ND		57.7	mg/Kg		03/25/24 08:25	03/25/24 17:06	1
Sulfide, Reactive (SW846 9034)	ND		154	mg/Kg		03/25/24 08:25	03/25/24 12:45	1
Total Organic Carbon (SW846 9060)	4780	F1	300	mg/Kg			03/21/24 13:08	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SW846 9045D)	8.4			SU			03/28/24 11:32	1
Temperature (SW846 9045D)	23.4			Degrees C			03/28/24 11:32	1
Specific Conductance (SM 2510B)	1200		10.0	uS/cm			03/28/24 11:04	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: Comp (5-10)

Lab Sample ID: 620-17450-8

Date Collected: 03/15/24 12:15

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 87.4

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Acenaphthylene	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
1-Methylnaphthalene	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Anthracene	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Benzo[a]anthracene	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Benzo[a]pyrene	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Benzo[b]fluoranthene	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Benzo[g,h,i]perylene	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Benzo[k]fluoranthene	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Chrysene	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Dibenz(a,h)anthracene	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Fluoranthene	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Fluorene	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Indeno[1,2,3-cd]pyrene	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
2-Methylnaphthalene	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Naphthalene	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Phenanthrene	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Pyrene	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Bis(2-ethylhexyl) phthalate	ND		17.9	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	46		30 - 130	03/21/24 08:36	03/21/24 16:14	1
Terphenyl-d14 (Surr)	65		30 - 130	03/21/24 08:36	03/21/24 16:14	1
2-Fluorobiphenyl (Surr)	41		30 - 130	03/21/24 08:36	03/21/24 16:14	1

Method: MA DEP 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
1,2,4-Trichlorobenzene	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
1,2-Dichlorobenzene	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
1,3-Dichlorobenzene	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
1,4-Dichlorobenzene	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
2,4,5-Trichlorophenol	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
2,4,6-Trichlorophenol	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
2,4-Dichlorophenol	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
2,4-Dimethylphenol	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
2,4-Dinitrophenol	ND		737	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
2,4-Dinitrotoluene	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
2,6-Dinitrotoluene	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
2-Chloronaphthalene	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
2-Chlorophenol	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
2-Methylphenol	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
2-Nitroaniline	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
2-Nitrophenol	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
3 & 4 Methylphenol	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
3,3'-Dichlorobenzidine	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
3-Nitroaniline	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
4,6-Dinitro-2-methylphenol	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
4-Bromophenyl phenyl ether	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
4-Chloro-3-methylphenol	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: Comp (5-10)

Lab Sample ID: 620-17450-8

Date Collected: 03/15/24 12:15

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 87.4

Method: MA DEP 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chloroaniline	ND	*-	186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
4-Chlorophenyl phenyl ether	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
4-Nitroaniline	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
4-Nitrophenol	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Acetophenone	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Aniline	ND	*-	368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Azobenzene/Diphenyldiazene	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Benzidine	ND	*-	737	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Benzoic acid	ND	*-	744	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Benzyl alcohol	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Bis(2-chloroethoxy)methane	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Bis(2-chloroethyl)ether	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
bis (2-chloroisopropyl) ether	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Bis(2-ethylhexyl) phthalate	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Butyl benzyl phthalate	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Carbazole	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Dibenzofuran	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Diethyl phthalate	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Dimethyl phthalate	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Di-n-butyl phthalate	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Di-n-octyl phthalate	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Hexachlorobenzene	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Hexachlorobutadiene	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Hexachlorocyclopentadiene	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Hexachloroethane	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Isophorone	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Nitrobenzene	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
N-Nitrosodimethylamine	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
N-Nitrosodi-n-propylamine	ND		186	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
N-Nitrosodiphenylamine	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Pentachloronitrobenzene	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Pentachlorophenol	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Phenol	ND		368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1
Pyridine	ND	*-	368	ug/Kg	☆	03/21/24 08:36	03/21/24 16:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	41		30 - 130	03/21/24 08:36	03/21/24 16:14	1
2-Fluorophenol (Surr)	45		15 - 110	03/21/24 08:36	03/21/24 16:14	1
Nitrobenzene-d5 (Surr)	42		30 - 130	03/21/24 08:36	03/21/24 16:14	1
Phenol-d5 (Surr)	45		15 - 110	03/21/24 08:36	03/21/24 16:14	1
2,4,6-Tribromophenol (Surr)	48		15 - 110	03/21/24 08:36	03/21/24 16:14	1
Terphenyl-d14 (Surr)	65		30 - 130	03/21/24 08:36	03/21/24 16:14	1

Method: MA DEP 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		22.1	ug/Kg	☆	03/19/24 14:48	03/22/24 00:14	1
PCB-1221	ND		22.1	ug/Kg	☆	03/19/24 14:48	03/22/24 00:14	1
PCB-1232	ND		22.1	ug/Kg	☆	03/19/24 14:48	03/22/24 00:14	1
PCB-1242	ND		22.1	ug/Kg	☆	03/19/24 14:48	03/22/24 00:14	1
PCB-1248	ND		22.1	ug/Kg	☆	03/19/24 14:48	03/22/24 00:14	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: Comp (5-10)

Date Collected: 03/15/24 12:15

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-8

Matrix: Solid

Percent Solids: 87.4

Method: MA DEP 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1254	ND		22.1	ug/Kg	☆	03/19/24 14:48	03/22/24 00:14	1
PCB-1262	ND		22.1	ug/Kg	☆	03/19/24 14:48	03/22/24 00:14	1
PCB-1260	ND		22.1	ug/Kg	☆	03/19/24 14:48	03/22/24 00:14	1
PCB-1268	ND		22.1	ug/Kg	☆	03/19/24 14:48	03/22/24 00:14	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	79		30 - 150			03/19/24 14:48	03/22/24 00:14	1
DCB Decachlorobiphenyl (Surr)	66		30 - 150			03/19/24 14:48	03/22/24 00:14	1

Method: SW846 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TEPH (C9-C36)	16.7		14.9	mg/Kg	☆	03/19/24 17:07	03/21/24 15:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctadecane (Surr)	84		40 - 140			03/19/24 17:07	03/21/24 15:57	1
o-Terphenyl (Surr)	73		40 - 140			03/19/24 17:07	03/21/24 15:57	1

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	3.60		2.88	mg/Kg	☆	03/26/24 08:24	03/27/24 15:18	2
Barium	39.3		1.92	mg/Kg	☆	03/26/24 08:24	03/27/24 15:18	2
Cadmium	ND		0.961	mg/Kg	☆	03/26/24 08:24	03/27/24 15:18	2
Chromium	17.4		1.92	mg/Kg	☆	03/26/24 08:24	03/27/24 15:18	2
Lead	5.34		2.88	mg/Kg	☆	03/26/24 08:24	03/27/24 15:18	2
Selenium	ND		2.88	mg/Kg	☆	03/26/24 08:24	03/27/24 15:18	2
Silver	ND		2.88	mg/Kg	☆	03/26/24 08:24	03/27/24 15:18	2

Method: SW846 6010D - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0150	mg/L		03/26/24 15:40	03/27/24 13:23	1

Method: SW846 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0512	mg/Kg	☆	03/19/24 11:28	03/19/24 15:46	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Flashpoint (SW846 1010A)	>170		50.0	Degrees F			03/21/24 10:01	1
Cyanide, Reactive (SW846 9012)	ND		59.9	mg/Kg		03/25/24 08:25	03/25/24 17:07	1
Sulfide, Reactive (SW846 9034)	ND		160	mg/Kg		03/25/24 08:25	03/25/24 12:45	1
Total Organic Carbon (SW846 9060)	1620		300	mg/Kg			03/21/24 13:29	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SW846 9045D)	7.9			SU			03/28/24 11:32	1
Temperature (SW846 9045D)	23.4			Degrees C			03/28/24 11:32	1
Specific Conductance (SM 2510B)	601		10.0	uS/cm			03/28/24 11:04	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-8 (0-5)

Lab Sample ID: 620-17450-9

Date Collected: 03/14/24 10:00

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 88.0

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Acetone	ND		61.9	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Acrylonitrile	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Benzene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Bromobenzene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Bromochloromethane	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Bromodichloromethane	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Bromoform	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Bromomethane	ND		12.4	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
2-Butanone (MEK)	ND		12.4	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
n-Butylbenzene	ND		12.4	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
sec-Butylbenzene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
tert-Butylbenzene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Carbon disulfide	ND		12.4	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Carbon tetrachloride	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Chlorobenzene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Chloroethane	ND		12.4	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Chloroform	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Chloromethane	ND		12.4	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
2-Chlorotoluene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
4-Chlorotoluene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
1,2-Dibromo-3-Chloropropane	ND		12.4	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Dibromochloromethane	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
1,2-Dibromoethane (EDB)	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Dibromomethane	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
1,2-Dichlorobenzene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
1,3-Dichlorobenzene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
1,4-Dichlorobenzene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Dichlorodifluoromethane (Freon 12)	ND		12.4	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
1,1-Dichloroethane	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
1,2-Dichloroethane	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
1,1-Dichloroethene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
cis-1,2-Dichloroethene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
trans-1,2-Dichloroethene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
1,2-Dichloropropane	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
1,3-Dichloropropane	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
2,2-Dichloropropane	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
1,1-Dichloropropene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
cis-1,3-Dichloropropene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
trans-1,3-Dichloropropene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Ethylbenzene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Hexachlorobutadiene	ND		12.4	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
2-Hexanone (MBK)	ND		12.4	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Isopropylbenzene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
4-Isopropyltoluene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Methyl tert-butyl ether	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
4-Methyl-2-pentanone (MIBK)	ND		12.4	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Methylene Chloride	ND		12.4	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1
Naphthalene	ND		6.19	ug/Kg	☆	03/26/24 07:37	03/26/24 14:40	1

Euofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-8 (0-5)

Lab Sample ID: 620-17450-9

Date Collected: 03/14/24 10:00

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 88.0

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
Styrene	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
1,1,1,2-Tetrachloroethane	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
1,1,2,2-Tetrachloroethane	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
Tetrachloroethene	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
Toluene	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
1,2,3-Trichlorobenzene	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
1,2,4-Trichlorobenzene	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
1,3,5-Trichlorobenzene	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
1,1,1-Trichloroethane	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
1,1,2-Trichloroethane	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
Trichloroethene	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
Trichlorofluoromethane (Freon 11)	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
1,2,3-Trichloropropane	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
1,2,4-Trimethylbenzene	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
1,3,5-Trimethylbenzene	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
Vinyl chloride	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
m,p-Xylene	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
o-Xylene	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
Tetrahydrofuran	ND		12.4	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
Ethyl ether	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
Tert-amyl methyl ether	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
Ethyl tert-butyl ether	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
di-Isopropyl ether	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
tert-Butanol	ND		124	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
1,4-Dioxane	ND		124	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
trans-1,4-Dichloro-2-butene	ND		31.0	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
Ethanol	ND		1240	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
1,3-Dichloropropene, Total	ND		6.19	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1
Xylenes, Total	ND		18.6	ug/Kg	✱	03/26/24 07:37	03/26/24 14:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	03/26/24 07:37	03/26/24 14:40	1
Toluene-d8 (Surr)	98		70 - 130	03/26/24 07:37	03/26/24 14:40	1
1,2-Dichloroethane-d4 (Surr)	101		70 - 130	03/26/24 07:37	03/26/24 14:40	1
Dibromofluoromethane (Surr)	100		70 - 130	03/26/24 07:37	03/26/24 14:40	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-8 (5-10)

Lab Sample ID: 620-17450-10

Date Collected: 03/14/24 11:50

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 77.8

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Acetone	ND		49.4	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Acrylonitrile	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Benzene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Bromobenzene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Bromochloromethane	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Bromodichloromethane	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Bromoform	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Bromomethane	ND		9.88	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
2-Butanone (MEK)	ND		9.88	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
n-Butylbenzene	ND		9.88	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
sec-Butylbenzene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
tert-Butylbenzene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Carbon disulfide	ND		9.88	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Carbon tetrachloride	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Chlorobenzene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Chloroethane	ND		9.88	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Chloroform	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Chloromethane	ND		9.88	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
2-Chlorotoluene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
4-Chlorotoluene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
1,2-Dibromo-3-Chloropropane	ND		9.88	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Dibromochloromethane	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
1,2-Dibromoethane (EDB)	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Dibromomethane	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
1,2-Dichlorobenzene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
1,3-Dichlorobenzene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
1,4-Dichlorobenzene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Dichlorodifluoromethane (Freon 12)	ND		9.88	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
1,1-Dichloroethane	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
1,2-Dichloroethane	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
1,1-Dichloroethene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
cis-1,2-Dichloroethene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
trans-1,2-Dichloroethene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
1,2-Dichloropropane	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
1,3-Dichloropropane	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
2,2-Dichloropropane	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
1,1-Dichloropropene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
cis-1,3-Dichloropropene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
trans-1,3-Dichloropropene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Ethylbenzene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Hexachlorobutadiene	ND		9.88	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
2-Hexanone (MBK)	ND		9.88	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Isopropylbenzene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
4-Isopropyltoluene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Methyl tert-butyl ether	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
4-Methyl-2-pentanone (MIBK)	ND		9.88	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Methylene Chloride	ND		9.88	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1
Naphthalene	ND		4.94	ug/Kg	☆	03/26/24 07:37	03/26/24 15:06	1

Euofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-8 (5-10)

Lab Sample ID: 620-17450-10

Date Collected: 03/14/24 11:50

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 77.8

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
Styrene	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
1,1,1,2-Tetrachloroethane	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
1,1,2,2-Tetrachloroethane	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
Tetrachloroethene	13.4		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
Toluene	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
1,2,3-Trichlorobenzene	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
1,2,4-Trichlorobenzene	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
1,3,5-Trichlorobenzene	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
1,1,1-Trichloroethane	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
1,1,2-Trichloroethane	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
Trichloroethene	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
Trichlorofluoromethane (Freon 11)	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
1,2,3-Trichloropropane	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
1,2,4-Trimethylbenzene	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
1,3,5-Trimethylbenzene	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
Vinyl chloride	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
m,p-Xylene	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
o-Xylene	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
Tetrahydrofuran	ND		9.88	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
Ethyl ether	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
Tert-amyl methyl ether	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
Ethyl tert-butyl ether	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
di-Isopropyl ether	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
tert-Butanol	ND		98.8	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
1,4-Dioxane	ND		98.8	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
trans-1,4-Dichloro-2-butene	ND		24.7	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
Ethanol	ND		988	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
1,3-Dichloropropene, Total	ND		4.94	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1
Xylenes, Total	ND		14.8	ug/Kg	✱	03/26/24 07:37	03/26/24 15:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	03/26/24 07:37	03/26/24 15:06	1
Toluene-d8 (Surr)	99		70 - 130	03/26/24 07:37	03/26/24 15:06	1
1,2-Dichloroethane-d4 (Surr)	103		70 - 130	03/26/24 07:37	03/26/24 15:06	1
Dibromofluoromethane (Surr)	100		70 - 130	03/26/24 07:37	03/26/24 15:06	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-7 (0-5)

Lab Sample ID: 620-17450-11

Date Collected: 03/14/24 11:10

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 91.0

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Acetone	ND		46.7	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Acrylonitrile	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Benzene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Bromobenzene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Bromochloromethane	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Bromodichloromethane	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Bromoform	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Bromomethane	ND		9.34	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
2-Butanone (MEK)	ND		9.34	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
n-Butylbenzene	ND		9.34	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
sec-Butylbenzene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
tert-Butylbenzene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Carbon disulfide	ND		9.34	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Carbon tetrachloride	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Chlorobenzene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Chloroethane	ND		9.34	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Chloroform	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Chloromethane	ND		9.34	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
2-Chlorotoluene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
4-Chlorotoluene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
1,2-Dibromo-3-Chloropropane	ND		9.34	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Dibromochloromethane	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
1,2-Dibromoethane (EDB)	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Dibromomethane	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
1,2-Dichlorobenzene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
1,3-Dichlorobenzene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
1,4-Dichlorobenzene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Dichlorodifluoromethane (Freon 12)	ND		9.34	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
1,1-Dichloroethane	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
1,2-Dichloroethane	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
1,1-Dichloroethene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
cis-1,2-Dichloroethene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
trans-1,2-Dichloroethene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
1,2-Dichloropropane	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
1,3-Dichloropropane	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
2,2-Dichloropropane	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
1,1-Dichloropropene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
cis-1,3-Dichloropropene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
trans-1,3-Dichloropropene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Ethylbenzene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Hexachlorobutadiene	ND		9.34	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
2-Hexanone (MBK)	ND		9.34	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Isopropylbenzene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
4-Isopropyltoluene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Methyl tert-butyl ether	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
4-Methyl-2-pentanone (MIBK)	ND		9.34	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Methylene Chloride	ND		9.34	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1
Naphthalene	ND		4.67	ug/Kg	☆	03/26/24 07:37	03/26/24 15:31	1

Euofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-7 (0-5)

Lab Sample ID: 620-17450-11

Date Collected: 03/14/24 11:10

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 91.0

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
Styrene	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
1,1,1,2-Tetrachloroethane	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
1,1,2,2-Tetrachloroethane	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
Tetrachloroethene	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
Toluene	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
1,2,3-Trichlorobenzene	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
1,2,4-Trichlorobenzene	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
1,3,5-Trichlorobenzene	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
1,1,1-Trichloroethane	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
1,1,2-Trichloroethane	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
Trichloroethene	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
Trichlorofluoromethane (Freon 11)	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
1,2,3-Trichloropropane	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
1,2,4-Trimethylbenzene	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
1,3,5-Trimethylbenzene	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
Vinyl chloride	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
m,p-Xylene	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
o-Xylene	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
Tetrahydrofuran	ND		9.34	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
Ethyl ether	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
Tert-amyl methyl ether	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
Ethyl tert-butyl ether	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
di-Isopropyl ether	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
tert-Butanol	ND		93.4	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
1,4-Dioxane	ND		93.4	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
trans-1,4-Dichloro-2-butene	ND		23.4	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
Ethanol	ND		934	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
1,3-Dichloropropene, Total	ND		4.67	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1
Xylenes, Total	ND		14.0	ug/Kg	✱	03/26/24 07:37	03/26/24 15:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	03/26/24 07:37	03/26/24 15:31	1
Toluene-d8 (Surr)	99		70 - 130	03/26/24 07:37	03/26/24 15:31	1
1,2-Dichloroethane-d4 (Surr)	100		70 - 130	03/26/24 07:37	03/26/24 15:31	1
Dibromofluoromethane (Surr)	101		70 - 130	03/26/24 07:37	03/26/24 15:31	1

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-7 (5-10)

Lab Sample ID: 620-17450-12

Date Collected: 03/14/24 12:10

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 78.4

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Acetone	ND		126	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Acrylonitrile	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Benzene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Bromobenzene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Bromochloromethane	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Bromodichloromethane	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Bromoform	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Bromomethane	ND		25.3	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
2-Butanone (MEK)	ND		25.3	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
n-Butylbenzene	ND		25.3	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
sec-Butylbenzene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
tert-Butylbenzene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Carbon disulfide	ND		25.3	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Carbon tetrachloride	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Chlorobenzene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Chloroethane	ND		25.3	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Chloroform	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Chloromethane	ND		25.3	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
2-Chlorotoluene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
4-Chlorotoluene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
1,2-Dibromo-3-Chloropropane	ND		25.3	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Dibromochloromethane	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
1,2-Dibromoethane (EDB)	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Dibromomethane	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
1,2-Dichlorobenzene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
1,3-Dichlorobenzene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
1,4-Dichlorobenzene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Dichlorodifluoromethane (Freon 12)	ND		25.3	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
1,1-Dichloroethane	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
1,2-Dichloroethane	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
1,1-Dichloroethene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
cis-1,2-Dichloroethene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
trans-1,2-Dichloroethene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
1,2-Dichloropropane	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
1,3-Dichloropropane	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
2,2-Dichloropropane	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
1,1-Dichloropropene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
cis-1,3-Dichloropropene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
trans-1,3-Dichloropropene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Ethylbenzene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Hexachlorobutadiene	ND		25.3	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
2-Hexanone (MBK)	ND		25.3	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Isopropylbenzene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
4-Isopropyltoluene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Methyl tert-butyl ether	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
4-Methyl-2-pentanone (MIBK)	ND		25.3	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Methylene Chloride	ND		25.3	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1
Naphthalene	ND		12.6	ug/Kg	☆	03/26/24 07:37	03/26/24 15:57	1

Euofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-7 (5-10)

Lab Sample ID: 620-17450-12

Date Collected: 03/14/24 12:10

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 78.4

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
Styrene	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
1,1,1,2-Tetrachloroethane	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
1,1,2,2-Tetrachloroethane	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
Tetrachloroethene	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
Toluene	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
1,2,3-Trichlorobenzene	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
1,2,4-Trichlorobenzene	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
1,3,5-Trichlorobenzene	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
1,1,1-Trichloroethane	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
1,1,2-Trichloroethane	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
Trichloroethene	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
Trichlorofluoromethane (Freon 11)	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
1,2,3-Trichloropropane	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
1,2,4-Trimethylbenzene	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
1,3,5-Trimethylbenzene	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
Vinyl chloride	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
m,p-Xylene	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
o-Xylene	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
Tetrahydrofuran	ND		25.3	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
Ethyl ether	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
Tert-amyl methyl ether	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
Ethyl tert-butyl ether	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
di-Isopropyl ether	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
tert-Butanol	ND		253	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
1,4-Dioxane	ND		253	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
trans-1,4-Dichloro-2-butene	ND		63.2	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
Ethanol	ND		2530	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
1,3-Dichloropropene, Total	ND		12.6	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1
Xylenes, Total	ND		37.9	ug/Kg	✱	03/26/24 07:37	03/26/24 15:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	03/26/24 07:37	03/26/24 15:57	1
Toluene-d8 (Surr)	99		70 - 130	03/26/24 07:37	03/26/24 15:57	1
1,2-Dichloroethane-d4 (Surr)	103		70 - 130	03/26/24 07:37	03/26/24 15:57	1
Dibromofluoromethane (Surr)	102		70 - 130	03/26/24 07:37	03/26/24 15:57	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-6 (0-5)

Lab Sample ID: 620-17450-13

Date Collected: 03/14/24 12:30

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 89.6

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Acetone	ND		52.1	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Acrylonitrile	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Benzene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Bromobenzene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Bromochloromethane	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Bromodichloromethane	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Bromoform	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Bromomethane	ND		10.4	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
2-Butanone (MEK)	ND		10.4	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
n-Butylbenzene	ND		10.4	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
sec-Butylbenzene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
tert-Butylbenzene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Carbon disulfide	ND		10.4	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Carbon tetrachloride	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Chlorobenzene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Chloroethane	ND		10.4	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Chloroform	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Chloromethane	ND		10.4	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
2-Chlorotoluene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
4-Chlorotoluene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
1,2-Dibromo-3-Chloropropane	ND		10.4	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Dibromochloromethane	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
1,2-Dibromoethane (EDB)	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Dibromomethane	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
1,2-Dichlorobenzene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
1,3-Dichlorobenzene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
1,4-Dichlorobenzene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Dichlorodifluoromethane (Freon 12)	ND		10.4	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
1,1-Dichloroethane	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
1,2-Dichloroethane	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
1,1-Dichloroethene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
cis-1,2-Dichloroethene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
trans-1,2-Dichloroethene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
1,2-Dichloropropane	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
1,3-Dichloropropane	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
2,2-Dichloropropane	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
1,1-Dichloropropene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
cis-1,3-Dichloropropene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
trans-1,3-Dichloropropene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Ethylbenzene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Hexachlorobutadiene	ND		10.4	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
2-Hexanone (MBK)	ND		10.4	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Isopropylbenzene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
4-Isopropyltoluene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Methyl tert-butyl ether	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
4-Methyl-2-pentanone (MIBK)	ND		10.4	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Methylene Chloride	ND		10.4	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1
Naphthalene	ND		5.21	ug/Kg	☆	03/26/24 07:37	03/26/24 16:24	1

Euofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-6 (0-5)

Lab Sample ID: 620-17450-13

Date Collected: 03/14/24 12:30

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 89.6

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
Styrene	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
1,1,1,2-Tetrachloroethane	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
1,1,2,2-Tetrachloroethane	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
Tetrachloroethene	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
Toluene	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
1,2,3-Trichlorobenzene	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
1,2,4-Trichlorobenzene	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
1,3,5-Trichlorobenzene	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
1,1,1-Trichloroethane	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
1,1,2-Trichloroethane	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
Trichloroethene	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
Trichlorofluoromethane (Freon 11)	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
1,2,3-Trichloropropane	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
1,2,4-Trimethylbenzene	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
1,3,5-Trimethylbenzene	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
Vinyl chloride	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
m,p-Xylene	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
o-Xylene	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
Tetrahydrofuran	ND		10.4	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
Ethyl ether	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
Tert-amyl methyl ether	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
Ethyl tert-butyl ether	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
di-Isopropyl ether	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
tert-Butanol	ND		104	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
1,4-Dioxane	ND		104	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
trans-1,4-Dichloro-2-butene	ND		26.1	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
Ethanol	ND		1040	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
1,3-Dichloropropene, Total	ND		5.21	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1
Xylenes, Total	ND		15.6	ug/Kg	✱	03/26/24 07:37	03/26/24 16:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130	03/26/24 07:37	03/26/24 16:24	1
Toluene-d8 (Surr)	99		70 - 130	03/26/24 07:37	03/26/24 16:24	1
1,2-Dichloroethane-d4 (Surr)	99		70 - 130	03/26/24 07:37	03/26/24 16:24	1
Dibromofluoromethane (Surr)	101		70 - 130	03/26/24 07:37	03/26/24 16:24	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-6 (5-10)

Lab Sample ID: 620-17450-14

Date Collected: 03/14/24 12:45

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 92.6

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
Acetone	ND		57.5	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
Acrylonitrile	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
Benzene	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
Bromobenzene	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
Bromochloromethane	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
Bromodichloromethane	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
Bromoform	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
Bromomethane	ND		11.5	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
2-Butanone (MEK)	ND		11.5	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
n-Butylbenzene	ND		11.5	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
sec-Butylbenzene	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
tert-Butylbenzene	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
Carbon disulfide	ND		11.5	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
Carbon tetrachloride	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
Chlorobenzene	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
Chloroethane	ND		11.5	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
Chloroform	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
Chloromethane	ND		11.5	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
2-Chlorotoluene	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
4-Chlorotoluene	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
1,2-Dibromo-3-Chloropropane	ND		11.5	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
Dibromochloromethane	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
1,2-Dibromoethane (EDB)	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
Dibromomethane	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
1,2-Dichlorobenzene	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
1,3-Dichlorobenzene	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
1,4-Dichlorobenzene	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
Dichlorodifluoromethane (Freon 12)	ND		11.5	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
1,1-Dichloroethane	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
1,2-Dichloroethane	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
1,1-Dichloroethene	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
cis-1,2-Dichloroethene	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
trans-1,2-Dichloroethene	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
1,2-Dichloropropane	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
1,3-Dichloropropane	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
2,2-Dichloropropane	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
1,1-Dichloropropene	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
cis-1,3-Dichloropropene	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
trans-1,3-Dichloropropene	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
Ethylbenzene	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
Hexachlorobutadiene	ND		11.5	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
2-Hexanone (MBK)	ND		11.5	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
Isopropylbenzene	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
4-Isopropyltoluene	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
Methyl tert-butyl ether	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
4-Methyl-2-pentanone (MIBK)	ND		11.5	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
Methylene Chloride	ND		11.5	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1
Naphthalene	ND		5.75	ug/Kg	☆	03/26/24 07:37	03/26/24 16:50	1

Euofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-6 (5-10)

Lab Sample ID: 620-17450-14

Date Collected: 03/14/24 12:45

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 92.6

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Styrene	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
1,1,1,2-Tetrachloroethane	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
1,1,2,2-Tetrachloroethane	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Tetrachloroethene	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Toluene	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
1,2,3-Trichlorobenzene	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
1,2,4-Trichlorobenzene	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
1,3,5-Trichlorobenzene	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
1,1,1-Trichloroethane	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
1,1,2-Trichloroethane	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Trichloroethene	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Trichlorofluoromethane (Freon 11)	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
1,2,3-Trichloropropane	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
1,2,4-Trimethylbenzene	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
1,3,5-Trimethylbenzene	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Vinyl chloride	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
m,p-Xylene	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
o-Xylene	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Tetrahydrofuran	ND		11.5	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Ethyl ether	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Tert-amyl methyl ether	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Ethyl tert-butyl ether	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
di-Isopropyl ether	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
tert-Butanol	ND		115	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
1,4-Dioxane	ND		115	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
trans-1,4-Dichloro-2-butene	ND		28.8	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Ethanol	ND		1150	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
1,3-Dichloropropene, Total	ND		5.75	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1
Xylenes, Total	ND		17.3	ug/Kg	✱	03/26/24 07:37	03/26/24 16:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	03/26/24 07:37	03/26/24 16:50	1
Toluene-d8 (Surr)	99		70 - 130	03/26/24 07:37	03/26/24 16:50	1
1,2-Dichloroethane-d4 (Surr)	101		70 - 130	03/26/24 07:37	03/26/24 16:50	1
Dibromofluoromethane (Surr)	101		70 - 130	03/26/24 07:37	03/26/24 16:50	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-4 (0-5)

Lab Sample ID: 620-17450-15

Date Collected: 03/14/24 13:40

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 89.4

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Acetone	ND		50.4	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Acrylonitrile	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Benzene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Bromobenzene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Bromochloromethane	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Bromodichloromethane	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Bromoform	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Bromomethane	ND		10.1	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
2-Butanone (MEK)	ND		10.1	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
n-Butylbenzene	ND		10.1	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
sec-Butylbenzene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
tert-Butylbenzene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Carbon disulfide	ND		10.1	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Carbon tetrachloride	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Chlorobenzene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Chloroethane	ND		10.1	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Chloroform	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Chloromethane	ND		10.1	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
2-Chlorotoluene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
4-Chlorotoluene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,2-Dibromo-3-Chloropropane	ND		10.1	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Dibromochloromethane	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,2-Dibromoethane (EDB)	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Dibromomethane	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,2-Dichlorobenzene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,3-Dichlorobenzene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,4-Dichlorobenzene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Dichlorodifluoromethane (Freon 12)	ND		10.1	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,1-Dichloroethane	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,2-Dichloroethane	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,1-Dichloroethene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
cis-1,2-Dichloroethene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
trans-1,2-Dichloroethene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,2-Dichloropropane	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,3-Dichloropropane	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
2,2-Dichloropropane	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,1-Dichloropropene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
cis-1,3-Dichloropropene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
trans-1,3-Dichloropropene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Ethylbenzene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Hexachlorobutadiene	ND		10.1	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
2-Hexanone (MBK)	ND		10.1	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Isopropylbenzene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
4-Isopropyltoluene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Methyl tert-butyl ether	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
4-Methyl-2-pentanone (MIBK)	ND		10.1	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Methylene Chloride	ND		10.1	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Naphthalene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1

Euofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-4 (0-5)

Lab Sample ID: 620-17450-15

Date Collected: 03/14/24 13:40

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 89.4

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Styrene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,1,1,2-Tetrachloroethane	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,1,2,2-Tetrachloroethane	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Tetrachloroethene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Toluene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,2,3-Trichlorobenzene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,2,4-Trichlorobenzene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,3,5-Trichlorobenzene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,1,1-Trichloroethane	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,1,2-Trichloroethane	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Trichloroethene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Trichlorofluoromethane (Freon 11)	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,2,3-Trichloropropane	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,2,4-Trimethylbenzene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,3,5-Trimethylbenzene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Vinyl chloride	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
m,p-Xylene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
o-Xylene	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Tetrahydrofuran	ND		10.1	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Ethyl ether	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Tert-amyl methyl ether	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Ethyl tert-butyl ether	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
di-Isopropyl ether	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
tert-Butanol	ND		101	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,4-Dioxane	ND		101	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
trans-1,4-Dichloro-2-butene	ND		25.2	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Ethanol	ND		1010	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
1,3-Dichloropropene, Total	ND		5.04	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1
Xylenes, Total	ND		15.1	ug/Kg	✱	03/26/24 07:37	03/26/24 17:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	03/26/24 07:37	03/26/24 17:15	1
Toluene-d8 (Surr)	100		70 - 130	03/26/24 07:37	03/26/24 17:15	1
1,2-Dichloroethane-d4 (Surr)	108		70 - 130	03/26/24 07:37	03/26/24 17:15	1
Dibromofluoromethane (Surr)	103		70 - 130	03/26/24 07:37	03/26/24 17:15	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-4 (5-10)

Lab Sample ID: 620-17450-16

Date Collected: 03/14/24 13:55

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 92.2

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Acetone	ND		52.6	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Acrylonitrile	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Benzene	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Bromobenzene	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Bromochloromethane	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Bromodichloromethane	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Bromoform	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Bromomethane	ND		10.5	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
2-Butanone (MEK)	ND		10.5	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
n-Butylbenzene	ND		10.5	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
sec-Butylbenzene	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
tert-Butylbenzene	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Carbon disulfide	ND		10.5	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Carbon tetrachloride	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Chlorobenzene	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Chloroethane	ND		10.5	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Chloroform	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Chloromethane	ND		10.5	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
2-Chlorotoluene	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
4-Chlorotoluene	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
1,2-Dibromo-3-Chloropropane	ND		10.5	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Dibromochloromethane	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
1,2-Dibromoethane (EDB)	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Dibromomethane	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
1,2-Dichlorobenzene	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
1,3-Dichlorobenzene	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
1,4-Dichlorobenzene	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Dichlorodifluoromethane (Freon 12)	ND		10.5	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
1,1-Dichloroethane	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
1,2-Dichloroethane	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
1,1-Dichloroethene	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
cis-1,2-Dichloroethene	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
trans-1,2-Dichloroethene	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
1,2-Dichloropropane	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
1,3-Dichloropropane	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
2,2-Dichloropropane	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
1,1-Dichloropropene	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
cis-1,3-Dichloropropene	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
trans-1,3-Dichloropropene	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Ethylbenzene	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Hexachlorobutadiene	ND		10.5	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
2-Hexanone (MBK)	ND		10.5	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Isopropylbenzene	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
4-Isopropyltoluene	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Methyl tert-butyl ether	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
4-Methyl-2-pentanone (MIBK)	ND		10.5	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Methylene Chloride	ND		10.5	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Naphthalene	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1

Euofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-4 (5-10)

Lab Sample ID: 620-17450-16

Date Collected: 03/14/24 13:55

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 92.2

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Styrene	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
1,1,1,2-Tetrachloroethane	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
1,1,2,2-Tetrachloroethane	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Tetrachloroethene	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Toluene	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
1,2,3-Trichlorobenzene	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
1,2,4-Trichlorobenzene	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
1,3,5-Trichlorobenzene	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
1,1,1-Trichloroethane	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
1,1,2-Trichloroethane	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Trichloroethene	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Trichlorofluoromethane (Freon 11)	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
1,2,3-Trichloropropane	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
1,2,4-Trimethylbenzene	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
1,3,5-Trimethylbenzene	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Vinyl chloride	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
m,p-Xylene	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
o-Xylene	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Tetrahydrofuran	ND		10.5	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Ethyl ether	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Tert-amyl methyl ether	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Ethyl tert-butyl ether	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
di-Isopropyl ether	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
tert-Butanol	ND		105	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
1,4-Dioxane	ND		105	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
trans-1,4-Dichloro-2-butene	ND		26.3	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Ethanol	ND		1050	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
1,3-Dichloropropene, Total	ND		5.26	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1
Xylenes, Total	ND		15.8	ug/Kg	✱	03/26/24 07:37	03/26/24 17:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	03/26/24 07:37	03/26/24 17:41	1
Toluene-d8 (Surr)	99		70 - 130	03/26/24 07:37	03/26/24 17:41	1
1,2-Dichloroethane-d4 (Surr)	102		70 - 130	03/26/24 07:37	03/26/24 17:41	1
Dibromofluoromethane (Surr)	100		70 - 130	03/26/24 07:37	03/26/24 17:41	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-5 (0-5)

Lab Sample ID: 620-17450-17

Date Collected: 03/14/24 14:25

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 89.7

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Acetone	ND		49.2	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Acrylonitrile	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Benzene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Bromobenzene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Bromochloromethane	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Bromodichloromethane	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Bromoform	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Bromomethane	ND		9.85	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
2-Butanone (MEK)	ND		9.85	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
n-Butylbenzene	ND		9.85	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
sec-Butylbenzene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
tert-Butylbenzene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Carbon disulfide	ND		9.85	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Carbon tetrachloride	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Chlorobenzene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Chloroethane	ND		9.85	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Chloroform	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Chloromethane	ND		9.85	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
2-Chlorotoluene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
4-Chlorotoluene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
1,2-Dibromo-3-Chloropropane	ND		9.85	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Dibromochloromethane	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
1,2-Dibromoethane (EDB)	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Dibromomethane	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
1,2-Dichlorobenzene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
1,3-Dichlorobenzene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
1,4-Dichlorobenzene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Dichlorodifluoromethane (Freon 12)	ND		9.85	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
1,1-Dichloroethane	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
1,2-Dichloroethane	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
1,1-Dichloroethene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
cis-1,2-Dichloroethene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
trans-1,2-Dichloroethene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
1,2-Dichloropropane	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
1,3-Dichloropropane	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
2,2-Dichloropropane	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
1,1-Dichloropropene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
cis-1,3-Dichloropropene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
trans-1,3-Dichloropropene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Ethylbenzene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Hexachlorobutadiene	ND		9.85	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
2-Hexanone (MBK)	ND		9.85	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Isopropylbenzene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
4-Isopropyltoluene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Methyl tert-butyl ether	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
4-Methyl-2-pentanone (MIBK)	ND		9.85	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Methylene Chloride	ND		9.85	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1
Naphthalene	ND		4.92	ug/Kg	☆	03/26/24 07:37	03/26/24 18:07	1

Euofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-5 (0-5)

Lab Sample ID: 620-17450-17

Date Collected: 03/14/24 14:25

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 89.7

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
Styrene	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
1,1,1,2-Tetrachloroethane	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
1,1,2,2-Tetrachloroethane	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
Tetrachloroethene	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
Toluene	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
1,2,3-Trichlorobenzene	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
1,2,4-Trichlorobenzene	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
1,3,5-Trichlorobenzene	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
1,1,1-Trichloroethane	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
1,1,2-Trichloroethane	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
Trichloroethene	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
Trichlorofluoromethane (Freon 11)	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
1,2,3-Trichloropropane	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
1,2,4-Trimethylbenzene	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
1,3,5-Trimethylbenzene	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
Vinyl chloride	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
m,p-Xylene	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
o-Xylene	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
Tetrahydrofuran	ND		9.85	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
Ethyl ether	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
Tert-amyl methyl ether	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
Ethyl tert-butyl ether	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
di-Isopropyl ether	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
tert-Butanol	ND		98.5	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
1,4-Dioxane	ND		98.5	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
trans-1,4-Dichloro-2-butene	ND		24.6	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
Ethanol	ND		985	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
1,3-Dichloropropene, Total	ND		4.92	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1
Xylenes, Total	ND		14.8	ug/Kg	✱	03/26/24 07:37	03/26/24 18:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	03/26/24 07:37	03/26/24 18:07	1
Toluene-d8 (Surr)	98		70 - 130	03/26/24 07:37	03/26/24 18:07	1
1,2-Dichloroethane-d4 (Surr)	101		70 - 130	03/26/24 07:37	03/26/24 18:07	1
Dibromofluoromethane (Surr)	101		70 - 130	03/26/24 07:37	03/26/24 18:07	1

Eurofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-5 (5-10)

Lab Sample ID: 620-17450-18

Date Collected: 03/14/24 12:10

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 92.9

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Acetone	ND		44.3	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Acrylonitrile	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Benzene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Bromobenzene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Bromochloromethane	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Bromodichloromethane	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Bromoform	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Bromomethane	ND		8.87	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
2-Butanone (MEK)	ND		8.87	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
n-Butylbenzene	ND		8.87	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
sec-Butylbenzene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
tert-Butylbenzene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Carbon disulfide	ND		8.87	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Carbon tetrachloride	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Chlorobenzene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Chloroethane	ND		8.87	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Chloroform	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Chloromethane	ND		8.87	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
2-Chlorotoluene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
4-Chlorotoluene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
1,2-Dibromo-3-Chloropropane	ND		8.87	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Dibromochloromethane	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
1,2-Dibromoethane (EDB)	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Dibromomethane	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
1,2-Dichlorobenzene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
1,3-Dichlorobenzene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
1,4-Dichlorobenzene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Dichlorodifluoromethane (Freon 12)	ND		8.87	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
1,1-Dichloroethane	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
1,2-Dichloroethane	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
1,1-Dichloroethene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
cis-1,2-Dichloroethene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
trans-1,2-Dichloroethene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
1,2-Dichloropropane	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
1,3-Dichloropropane	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
2,2-Dichloropropane	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
1,1-Dichloropropene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
cis-1,3-Dichloropropene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
trans-1,3-Dichloropropene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Ethylbenzene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Hexachlorobutadiene	ND		8.87	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
2-Hexanone (MBK)	ND		8.87	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Isopropylbenzene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
4-Isopropyltoluene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Methyl tert-butyl ether	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
4-Methyl-2-pentanone (MIBK)	ND		8.87	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Methylene Chloride	ND		8.87	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1
Naphthalene	ND		4.43	ug/Kg	☆	03/26/24 07:37	03/26/24 18:33	1

Euofins New England

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-5 (5-10)

Lab Sample ID: 620-17450-18

Date Collected: 03/14/24 12:10

Matrix: Solid

Date Received: 03/18/24 15:25

Percent Solids: 92.9

Method: MA DEP 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
Styrene	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
1,1,1,2-Tetrachloroethane	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
1,1,2,2-Tetrachloroethane	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
Tetrachloroethene	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
Toluene	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
1,2,3-Trichlorobenzene	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
1,2,4-Trichlorobenzene	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
1,3,5-Trichlorobenzene	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
1,1,1-Trichloroethane	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
1,1,2-Trichloroethane	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
Trichloroethene	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
Trichlorofluoromethane (Freon 11)	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
1,2,3-Trichloropropane	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
1,2,4-Trimethylbenzene	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
1,3,5-Trimethylbenzene	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
Vinyl chloride	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
m,p-Xylene	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
o-Xylene	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
Tetrahydrofuran	ND		8.87	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
Ethyl ether	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
Tert-amyl methyl ether	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
Ethyl tert-butyl ether	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
di-Isopropyl ether	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
tert-Butanol	ND		88.7	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
1,4-Dioxane	ND		88.7	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
trans-1,4-Dichloro-2-butene	ND		22.2	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
Ethanol	ND		887	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
1,3-Dichloropropene, Total	ND		4.43	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1
Xylenes, Total	ND		13.3	ug/Kg	✱	03/26/24 07:37	03/26/24 18:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	03/26/24 07:37	03/26/24 18:33	1
Toluene-d8 (Surr)	100		70 - 130	03/26/24 07:37	03/26/24 18:33	1
1,2-Dichloroethane-d4 (Surr)	102		70 - 130	03/26/24 07:37	03/26/24 18:33	1
Dibromofluoromethane (Surr)	101		70 - 130	03/26/24 07:37	03/26/24 18:33	1

Eurofins New England

Surrogate Summary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		BFB (70-130)	TOL (70-130)	DCA (70-130)	DBFM (70-130)
620-17450-1	ATC-3 (0-5)	97	97	99	97
620-17450-2	ATC-3 (5-10)	97	98	100	100
620-17450-3	ATC-2 (0-5)	97	97	100	100
620-17450-4	ATC-2 (5-10)	99	99	113	105
620-17450-5	ATC-1 (0-5)	97	99	101	100
620-17450-6	ATC-1 (5-10)	97	99	101	101
620-17450-9	ATC-8 (0-5)	98	98	101	100
620-17450-10	ATC-8 (5-10)	99	99	103	100
620-17450-11	ATC-7 (0-5)	97	99	100	101
620-17450-12	ATC-7 (5-10)	96	99	103	102
620-17450-13	ATC-6 (0-5)	95	99	99	101
620-17450-14	ATC-6 (5-10)	96	99	101	101
620-17450-15	ATC-4 (0-5)	97	100	108	103
620-17450-16	ATC-4 (5-10)	99	99	102	100
620-17450-17	ATC-5 (0-5)	96	98	101	101
620-17450-18	ATC-5 (5-10)	96	100	102	101
LCS 620-33086/1-A	Lab Control Sample	100	100	99	101
LCSD 620-33086/2-A	Lab Control Sample Dup	100	101	98	101
MB 620-33086/3-A	Method Blank	100	99	102	100

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

DCA = 1,2-Dichloroethane-d4 (Surr)

DBFM = Dibromofluoromethane (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		FBP (30-130)	2FP (15-110)	NBZ (30-130)	PHL (15-110)	TBP (15-110)	TPHL (30-130)
620-17450-7	Comp (0-5)	50	50	39	54	63	76
620-17450-8	Comp (5-10)	41	45	42	45	48	65
LCS 620-32927/2-A	Lab Control Sample	75	75	71	76	77	77
LCSD 620-32927/3-A	Lab Control Sample Dup	73	75	68	75	79	85
MB 620-32927/1-A	Method Blank	56	64	50	60	58	86

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)

2FP = 2-Fluorophenol (Surr)

NBZ = Nitrobenzene-d5 (Surr)

PHL = Phenol-d5 (Surr)

TBP = 2,4,6-Tribromophenol (Surr)

TPHL = Terphenyl-d14 (Surr)

Eurofins New England

Surrogate Summary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
Lab Sample ID	Client Sample ID	NBZ (30-130)	TPHL (30-130)	FBP (30-130)
620-17450-7	Comp (0-5)	43	76	51
620-17450-8	Comp (5-10)	46	65	41
MB 620-32927/1-A	Method Blank	55	86	57
Surrogate Legend				
NBZ = Nitrobenzene-d5 (Surr)				
TPHL = Terphenyl-d14 (Surr)				
FBP = 2-Fluorobiphenyl (Surr)				

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	TCX1 (30-150)	DCB1 (30-150)
620-17450-7	Comp (0-5)	73	88
620-17450-8	Comp (5-10)	79	66
Surrogate Legend			
TCX = Tetrachloro-m-xylene			
DCB = DCB Decachlorobiphenyl (Surr)			

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1COD (40-140)	OTPH (40-140)
620-17450-7	Comp (0-5)	100	72
620-17450-8	Comp (5-10)	84	73
LCS 620-32878/2-A	Lab Control Sample	84	79
LCSD 620-32878/3-A	Lab Control Sample Dup	69	64
MB 620-32878/1-A	Method Blank	58	55
Surrogate Legend			
1COD = 1-Chlorooctadecane (Surr)			
OTPH = o-Terphenyl (Surr)			

QC Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 620-33086/3-A

Matrix: Solid

Analysis Batch: 33087

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 33086

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Acetone	ND		50.0	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Acrylonitrile	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Benzene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Bromobenzene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Bromochloromethane	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Bromodichloromethane	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Bromoform	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Bromomethane	ND		10.0	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
2-Butanone (MEK)	ND		10.0	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
n-Butylbenzene	ND		10.0	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
sec-Butylbenzene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
tert-Butylbenzene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Carbon disulfide	ND		10.0	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Carbon tetrachloride	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Chlorobenzene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Chloroethane	ND		10.0	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Chloroform	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Chloromethane	ND		10.0	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
2-Chlorotoluene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
4-Chlorotoluene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,2-Dibromo-3-Chloropropane	ND		10.0	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Dibromochloromethane	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,2-Dibromoethane (EDB)	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Dibromomethane	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,2-Dichlorobenzene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,3-Dichlorobenzene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,4-Dichlorobenzene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Dichlorodifluoromethane (Freon 12)	ND		10.0	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,1-Dichloroethane	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,2-Dichloroethane	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,1-Dichloroethene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
cis-1,2-Dichloroethene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
trans-1,2-Dichloroethene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,2-Dichloropropane	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,3-Dichloropropane	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
2,2-Dichloropropane	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,1-Dichloropropene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
cis-1,3-Dichloropropene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
trans-1,3-Dichloropropene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Ethylbenzene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Hexachlorobutadiene	ND		10.0	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
2-Hexanone (MBK)	ND		10.0	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Isopropylbenzene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
4-Isopropyltoluene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Methyl tert-butyl ether	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Methylene Chloride	ND		10.0	ug/Kg		03/26/24 07:37	03/26/24 10:56	1

Euofins New England

QC Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 620-33086/3-A

Matrix: Solid

Analysis Batch: 33087

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 33086

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
N-Propylbenzene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Styrene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,1,1,2-Tetrachloroethane	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,1,1,2,2-Tetrachloroethane	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Tetrachloroethene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Toluene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,2,3-Trichlorobenzene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,2,4-Trichlorobenzene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,3,5-Trichlorobenzene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,1,1-Trichloroethane	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,1,2-Trichloroethane	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Trichloroethene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Trichlorofluoromethane (Freon 11)	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,2,3-Trichloropropane	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,2,4-Trimethylbenzene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,3,5-Trimethylbenzene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Vinyl chloride	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
m,p-Xylene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
o-Xylene	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Tetrahydrofuran	ND		10.0	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Ethyl ether	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Tert-amyl methyl ether	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Ethyl tert-butyl ether	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
di-Isopropyl ether	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
tert-Butanol	ND		100	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,4-Dioxane	ND		100	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
trans-1,4-Dichloro-2-butene	ND		25.0	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Ethanol	ND		1000	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
1,3-Dichloropropene, Total	ND		5.00	ug/Kg		03/26/24 07:37	03/26/24 10:56	1
Xylenes, Total	ND		15.0	ug/Kg		03/26/24 07:37	03/26/24 10:56	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	03/26/24 07:37	03/26/24 10:56	1
Toluene-d8 (Surr)	99		70 - 130	03/26/24 07:37	03/26/24 10:56	1
1,2-Dichloroethane-d4 (Surr)	102		70 - 130	03/26/24 07:37	03/26/24 10:56	1
Dibromofluoromethane (Surr)	100		70 - 130	03/26/24 07:37	03/26/24 10:56	1

Lab Sample ID: LCS 620-33086/1-A

Matrix: Solid

Analysis Batch: 33087

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 33086

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.0	18.80		ug/Kg		94	70 - 130
Acetone	20.0	19.91	J	ug/Kg		100	70 - 130
Acrylonitrile	20.0	18.90		ug/Kg		94	70 - 130
Benzene	20.0	19.74		ug/Kg		99	70 - 130
Bromobenzene	20.0	19.44		ug/Kg		97	70 - 130

Eurofins New England

QC Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 620-33086/1-A

Matrix: Solid

Analysis Batch: 33087

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 33086

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromochloromethane	20.0	19.65		ug/Kg		98	70 - 130
Bromodichloromethane	20.0	19.48		ug/Kg		97	70 - 130
Bromoform	20.0	18.46		ug/Kg		92	70 - 130
Bromomethane	20.0	18.25		ug/Kg		91	70 - 130
2-Butanone (MEK)	20.0	20.90		ug/Kg		105	70 - 130
n-Butylbenzene	20.0	18.28		ug/Kg		91	70 - 130
sec-Butylbenzene	20.0	19.96		ug/Kg		100	70 - 130
tert-Butylbenzene	20.0	18.99		ug/Kg		95	70 - 130
Carbon disulfide	20.0	19.07		ug/Kg		95	70 - 130
Carbon tetrachloride	20.0	19.07		ug/Kg		95	70 - 130
Chlorobenzene	20.0	19.44		ug/Kg		97	70 - 130
Chloroethane	20.0	18.66		ug/Kg		93	70 - 130
Chloroform	20.0	19.45		ug/Kg		97	70 - 130
Chloromethane	20.0	19.80		ug/Kg		99	70 - 130
2-Chlorotoluene	20.0	19.62		ug/Kg		98	70 - 130
4-Chlorotoluene	20.0	19.41		ug/Kg		97	70 - 130
1,2-Dibromo-3-Chloropropane	20.0	19.73		ug/Kg		99	70 - 130
Dibromochloromethane	20.0	19.12		ug/Kg		96	70 - 130
1,2-Dibromoethane (EDB)	20.0	19.94		ug/Kg		100	70 - 130
Dibromomethane	20.0	19.81		ug/Kg		99	70 - 130
1,2-Dichlorobenzene	20.0	18.21		ug/Kg		91	70 - 130
1,3-Dichlorobenzene	20.0	19.39		ug/Kg		97	70 - 130
1,4-Dichlorobenzene	20.0	18.93		ug/Kg		95	70 - 130
Dichlorodifluoromethane (Freon 12)	20.0	18.58		ug/Kg		93	70 - 130
1,1-Dichloroethane	20.0	19.53		ug/Kg		98	70 - 130
1,2-Dichloroethane	20.0	19.50		ug/Kg		98	70 - 130
1,1-Dichloroethene	20.0	19.27		ug/Kg		96	70 - 130
cis-1,2-Dichloroethene	20.0	19.92		ug/Kg		100	70 - 130
trans-1,2-Dichloroethene	20.0	19.75		ug/Kg		99	70 - 130
1,2-Dichloropropane	20.0	19.63		ug/Kg		98	70 - 130
1,3-Dichloropropane	20.0	20.01		ug/Kg		100	70 - 130
2,2-Dichloropropane	20.0	19.68		ug/Kg		98	70 - 130
1,1-Dichloropropene	20.0	20.07		ug/Kg		100	70 - 130
cis-1,3-Dichloropropene	20.0	19.44		ug/Kg		97	70 - 130
trans-1,3-Dichloropropene	20.0	19.97		ug/Kg		100	70 - 130
Ethylbenzene	20.0	19.70		ug/Kg		98	70 - 130
Hexachlorobutadiene	20.0	18.83		ug/Kg		94	70 - 130
2-Hexanone (MBK)	20.0	18.68		ug/Kg		93	70 - 130
Isopropylbenzene	20.0	19.06		ug/Kg		95	70 - 130
4-Isopropyltoluene	20.0	19.14		ug/Kg		96	70 - 130
Methyl tert-butyl ether	20.0	20.44		ug/Kg		102	70 - 130
4-Methyl-2-pentanone (MIBK)	20.0	20.57		ug/Kg		103	70 - 130
Methylene Chloride	20.0	19.10		ug/Kg		95	70 - 130
Naphthalene	20.0	20.69		ug/Kg		103	70 - 130
N-Propylbenzene	20.0	19.71		ug/Kg		99	70 - 130
Styrene	20.0	19.27		ug/Kg		96	70 - 130
1,1,1,2-Tetrachloroethane	20.0	19.24		ug/Kg		96	70 - 130
1,1,2,2-Tetrachloroethane	20.0	19.05		ug/Kg		95	70 - 130

Eurofins New England

QC Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 620-33086/1-A

Matrix: Solid

Analysis Batch: 33087

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 33086

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Tetrachloroethene	20.0	19.72		ug/Kg		99	70 - 130
Toluene	20.0	19.65		ug/Kg		98	70 - 130
1,2,3-Trichlorobenzene	20.0	20.91		ug/Kg		105	70 - 130
1,2,4-Trichlorobenzene	20.0	19.81		ug/Kg		99	70 - 130
1,3,5-Trichlorobenzene	20.0	18.74		ug/Kg		94	70 - 130
1,1,1-Trichloroethane	20.0	19.38		ug/Kg		97	70 - 130
1,1,2-Trichloroethane	20.0	19.62		ug/Kg		98	70 - 130
Trichloroethene	20.0	19.07		ug/Kg		95	70 - 130
Trichlorofluoromethane (Freon 11)	20.0	19.01		ug/Kg		95	70 - 130
1,2,3-Trichloropropane	20.0	19.44		ug/Kg		97	70 - 130
1,2,4-Trimethylbenzene	20.0	18.86		ug/Kg		94	70 - 130
1,3,5-Trimethylbenzene	20.0	19.64		ug/Kg		98	70 - 130
Vinyl chloride	20.0	18.81		ug/Kg		94	70 - 130
m,p-Xylene	20.0	19.63		ug/Kg		98	70 - 130
o-Xylene	20.0	19.32		ug/Kg		97	70 - 130
Tetrahydrofuran	20.0	20.17		ug/Kg		101	70 - 130
Ethyl ether	20.0	19.60		ug/Kg		98	70 - 130
Tert-amyl methyl ether	20.0	19.75		ug/Kg		99	70 - 130
Ethyl tert-butyl ether	20.0	20.42		ug/Kg		102	70 - 130
di-Isopropyl ether	20.0	20.16		ug/Kg		101	70 - 130
tert-Butanol	200	215.9		ug/Kg		108	70 - 130
1,4-Dioxane	200	209.6		ug/Kg		105	70 - 130
trans-1,4-Dichloro-2-butene	20.0	18.36	J	ug/Kg		92	70 - 130
Ethanol	400	389.9	J	ug/Kg		97	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
Toluene-d8 (Surr)	100		70 - 130
1,2-Dichloroethane-d4 (Surr)	99		70 - 130
Dibromofluoromethane (Surr)	101		70 - 130

Lab Sample ID: LCSD 620-33086/2-A

Matrix: Solid

Analysis Batch: 33087

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 33086

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.0	19.20		ug/Kg		96	70 - 130	2	30
Acetone	20.0	17.70	J	ug/Kg		88	70 - 130	12	30
Acrylonitrile	20.0	18.69		ug/Kg		93	70 - 130	1	30
Benzene	20.0	19.95		ug/Kg		100	70 - 130	1	30
Bromobenzene	20.0	19.59		ug/Kg		98	70 - 130	1	30
Bromochloromethane	20.0	20.27		ug/Kg		101	70 - 130	3	30
Bromodichloromethane	20.0	19.66		ug/Kg		98	70 - 130	1	30
Bromoform	20.0	18.18		ug/Kg		91	70 - 130	2	30
Bromomethane	20.0	17.81		ug/Kg		89	70 - 130	2	30
2-Butanone (MEK)	20.0	18.73		ug/Kg		94	70 - 130	11	30
n-Butylbenzene	20.0	18.30		ug/Kg		92	70 - 130	0	30

Eurofins New England

QC Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 620-33086/2-A

Matrix: Solid

Analysis Batch: 33087

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 33086

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
sec-Butylbenzene	20.0	19.93		ug/Kg		100	70 - 130	0	30
tert-Butylbenzene	20.0	19.53		ug/Kg		98	70 - 130	3	30
Carbon disulfide	20.0	19.12		ug/Kg		96	70 - 130	0	30
Carbon tetrachloride	20.0	19.60		ug/Kg		98	70 - 130	3	30
Chlorobenzene	20.0	19.75		ug/Kg		99	70 - 130	2	30
Chloroethane	20.0	19.15		ug/Kg		96	70 - 130	3	30
Chloroform	20.0	19.76		ug/Kg		99	70 - 130	2	30
Chloromethane	20.0	19.69		ug/Kg		98	70 - 130	1	30
2-Chlorotoluene	20.0	19.79		ug/Kg		99	70 - 130	1	30
4-Chlorotoluene	20.0	19.50		ug/Kg		98	70 - 130	0	30
1,2-Dibromo-3-Chloropropane	20.0	19.65		ug/Kg		98	70 - 130	0	30
Dibromochloromethane	20.0	19.25		ug/Kg		96	70 - 130	1	30
1,2-Dibromoethane (EDB)	20.0	19.72		ug/Kg		99	70 - 130	1	30
Dibromomethane	20.0	19.48		ug/Kg		97	70 - 130	2	30
1,2-Dichlorobenzene	20.0	18.63		ug/Kg		93	70 - 130	2	30
1,3-Dichlorobenzene	20.0	19.50		ug/Kg		97	70 - 130	1	30
1,4-Dichlorobenzene	20.0	19.10		ug/Kg		95	70 - 130	1	30
Dichlorodifluoromethane (Freon 12)	20.0	18.81		ug/Kg		94	70 - 130	1	30
1,1-Dichloroethane	20.0	19.83		ug/Kg		99	70 - 130	2	30
1,2-Dichloroethane	20.0	19.57		ug/Kg		98	70 - 130	0	30
1,1-Dichloroethene	20.0	19.71		ug/Kg		99	70 - 130	2	30
cis-1,2-Dichloroethene	20.0	20.11		ug/Kg		101	70 - 130	1	30
trans-1,2-Dichloroethene	20.0	19.86		ug/Kg		99	70 - 130	1	30
1,2-Dichloropropane	20.0	19.78		ug/Kg		99	70 - 130	1	30
1,3-Dichloropropane	20.0	19.81		ug/Kg		99	70 - 130	1	30
2,2-Dichloropropane	20.0	19.78		ug/Kg		99	70 - 130	0	30
1,1-Dichloropropene	20.0	20.47		ug/Kg		102	70 - 130	2	30
cis-1,3-Dichloropropene	20.0	19.56		ug/Kg		98	70 - 130	1	30
trans-1,3-Dichloropropene	20.0	19.71		ug/Kg		99	70 - 130	1	30
Ethylbenzene	20.0	19.96		ug/Kg		100	70 - 130	1	30
Hexachlorobutadiene	20.0	19.93		ug/Kg		100	70 - 130	6	30
2-Hexanone (MBK)	20.0	17.22		ug/Kg		86	70 - 130	8	30
Isopropylbenzene	20.0	19.32		ug/Kg		97	70 - 130	1	30
4-Isopropyltoluene	20.0	19.59		ug/Kg		98	70 - 130	2	30
Methyl tert-butyl ether	20.0	20.32		ug/Kg		102	70 - 130	1	30
4-Methyl-2-pentanone (MIBK)	20.0	19.12		ug/Kg		96	70 - 130	7	30
Methylene Chloride	20.0	19.41		ug/Kg		97	70 - 130	2	30
Naphthalene	20.0	20.94		ug/Kg		105	70 - 130	1	30
N-Propylbenzene	20.0	19.79		ug/Kg		99	70 - 130	0	30
Styrene	20.0	19.22		ug/Kg		96	70 - 130	0	30
1,1,1,2-Tetrachloroethane	20.0	19.46		ug/Kg		97	70 - 130	1	30
1,1,2,2-Tetrachloroethane	20.0	18.74		ug/Kg		94	70 - 130	2	30
Tetrachloroethene	20.0	20.01		ug/Kg		100	70 - 130	1	30
Toluene	20.0	20.00		ug/Kg		100	70 - 130	2	30
1,2,3-Trichlorobenzene	20.0	21.12		ug/Kg		106	70 - 130	1	30
1,2,4-Trichlorobenzene	20.0	20.08		ug/Kg		100	70 - 130	1	30
1,3,5-Trichlorobenzene	20.0	19.10		ug/Kg		96	70 - 130	2	30
1,1,1-Trichloroethane	20.0	19.64		ug/Kg		98	70 - 130	1	30

Eurofins New England

QC Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 620-33086/2-A

Matrix: Solid

Analysis Batch: 33087

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 33086

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,2-Trichloroethane	20.0	19.85		ug/Kg		99	70 - 130	1	30
Trichloroethene	20.0	19.38		ug/Kg		97	70 - 130	2	30
Trichlorofluoromethane (Freon 11)	20.0	19.06		ug/Kg		95	70 - 130	0	30
1,2,3-Trichloropropane	20.0	19.00		ug/Kg		95	70 - 130	2	30
1,2,4-Trimethylbenzene	20.0	19.02		ug/Kg		95	70 - 130	1	30
1,3,5-Trimethylbenzene	20.0	19.95		ug/Kg		100	70 - 130	2	30
Vinyl chloride	20.0	18.85		ug/Kg		94	70 - 130	0	30
m,p-Xylene	20.0	19.88		ug/Kg		99	70 - 130	1	30
o-Xylene	20.0	19.51		ug/Kg		98	70 - 130	1	30
Tetrahydrofuran	20.0	19.04		ug/Kg		95	70 - 130	6	30
Ethyl ether	20.0	19.98		ug/Kg		100	70 - 130	2	30
Tert-amyl methyl ether	20.0	19.77		ug/Kg		99	70 - 130	0	30
Ethyl tert-butyl ether	20.0	20.59		ug/Kg		103	70 - 130	1	30
di-Isopropyl ether	20.0	20.36		ug/Kg		102	70 - 130	1	30
tert-Butanol	200	202.9		ug/Kg		101	70 - 130	6	30
1,4-Dioxane	200	191.8		ug/Kg		96	70 - 130	9	30
trans-1,4-Dichloro-2-butene	20.0	17.90	J	ug/Kg		90	70 - 130	2	30
Ethanol	400	313.8	J	ug/Kg		78	70 - 130	22	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
Toluene-d8 (Surr)	101		70 - 130
1,2-Dichloroethane-d4 (Surr)	98		70 - 130
Dibromofluoromethane (Surr)	101		70 - 130

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 620-32927/1-A

Matrix: Solid

Analysis Batch: 32951

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 32927

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
1,2,4-Trichlorobenzene	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
1,2-Dichlorobenzene	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
1,3-Dichlorobenzene	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
1,4-Dichlorobenzene	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
2,4,5-Trichlorophenol	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
2,4,6-Trichlorophenol	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
2,4-Dichlorophenol	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
2,4-Dimethylphenol	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
2,4-Dinitrophenol	ND		660	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
2,4-Dinitrotoluene	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
2,6-Dinitrotoluene	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
2-Chloronaphthalene	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
2-Chlorophenol	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
2-Methylphenol	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
2-Nitroaniline	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1

Eurofins New England

QC Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 620-32927/1-A

Matrix: Solid

Analysis Batch: 32951

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 32927

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitrophenol	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
3 & 4 Methylphenol	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
3,3'-Dichlorobenzidine	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
3-Nitroaniline	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
4,6-Dinitro-2-methylphenol	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
4-Bromophenyl phenyl ether	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
4-Chloro-3-methylphenol	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
4-Chloroaniline	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
4-Chlorophenyl phenyl ether	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
4-Nitroaniline	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
4-Nitrophenol	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Acetophenone	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Aniline	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Azobenzene/Diphenyldiazene	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Benzidine	ND		660	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Benzoic acid	ND		667	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Benzyl alcohol	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Bis(2-chloroethoxy)methane	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Bis(2-chloroethyl)ether	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
bis (2-chloroisopropyl) ether	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Bis(2-ethylhexyl) phthalate	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Butyl benzyl phthalate	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Carbazole	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Dibenzofuran	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Diethyl phthalate	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Dimethyl phthalate	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Di-n-butyl phthalate	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Di-n-octyl phthalate	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Hexachlorobenzene	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Hexachlorobutadiene	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Hexachlorocyclopentadiene	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Hexachloroethane	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Isophorone	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Nitrobenzene	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
N-Nitrosodimethylamine	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
N-Nitrosodi-n-propylamine	ND		167	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
N-Nitrosodiphenylamine	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Pentachloronitrobenzene	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Pentachlorophenol	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Phenol	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Pyridine	ND		330	ug/Kg		03/21/24 08:36	03/21/24 13:46	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	56		30 - 130	03/21/24 08:36	03/21/24 13:46	1
2-Fluorophenol (Surr)	64		15 - 110	03/21/24 08:36	03/21/24 13:46	1
Nitrobenzene-d5 (Surr)	50		30 - 130	03/21/24 08:36	03/21/24 13:46	1
Phenol-d5 (Surr)	60		15 - 110	03/21/24 08:36	03/21/24 13:46	1
2,4,6-Tribromophenol (Surr)	58		15 - 110	03/21/24 08:36	03/21/24 13:46	1

Eurolins New England

QC Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 620-32927/1-A

Matrix: Solid

Analysis Batch: 32951

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 32927

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14 (Surr)	86		30 - 130	03/21/24 08:36	03/21/24 13:46	1

Lab Sample ID: LCS 620-32927/2-A

Matrix: Solid

Analysis Batch: 32951

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 32927

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,4,5-Tetrachlorobenzene	1670	1173		ug/Kg		70	40 - 140
1,2,4-Trichlorobenzene	1670	1139		ug/Kg		68	40 - 140
1,2-Dichlorobenzene	1670	1122		ug/Kg		67	40 - 140
1,3-Dichlorobenzene	1670	1171		ug/Kg		70	40 - 140
1,4-Dichlorobenzene	1670	1147		ug/Kg		69	40 - 140
2,4,5-Trichlorophenol	1670	1191		ug/Kg		71	30 - 130
2,4,6-Trichlorophenol	1670	1318		ug/Kg		79	30 - 130
2,4-Dichlorophenol	1670	1163		ug/Kg		70	30 - 130
2,4-Dimethylphenol	1670	1113		ug/Kg		67	30 - 130
2,4-Dinitrophenol	1670	968.3		ug/Kg		58	30 - 130
2,4-Dinitrotoluene	1670	1430		ug/Kg		86	40 - 140
2,6-Dinitrotoluene	1670	1332		ug/Kg		80	40 - 140
2-Chloronaphthalene	1670	1284		ug/Kg		77	40 - 140
2-Chlorophenol	1670	1209		ug/Kg		73	30 - 130
2-Methylphenol	1670	1235		ug/Kg		74	30 - 130
2-Nitroaniline	1670	987.5		ug/Kg		59	40 - 140
2-Nitrophenol	1670	1130		ug/Kg		68	30 - 130
3 & 4 Methylphenol	1670	1243		ug/Kg		75	30 - 130
3,3'-Dichlorobenzidine	1670	1636		ug/Kg		98	40 - 140
3-Nitroaniline	1670	733.0		ug/Kg		44	40 - 140
4,6-Dinitro-2-methylphenol	1670	1157		ug/Kg		69	30 - 130
4-Bromophenyl phenyl ether	1670	1330		ug/Kg		80	40 - 140
4-Chloro-3-methylphenol	1670	1303		ug/Kg		78	30 - 130
4-Chloroaniline	1670	520.8	*-	ug/Kg		31	40 - 140
4-Chlorophenyl phenyl ether	1670	1380		ug/Kg		83	40 - 140
4-Nitroaniline	1670	929.3		ug/Kg		56	40 - 140
4-Nitrophenol	1670	1315		ug/Kg		79	30 - 130
Acetophenone	1670	1179		ug/Kg		71	40 - 140
Aniline	1670	606.8	*-	ug/Kg		36	40 - 140
Azobenzene/Diphenyldiazene	1670	885.0		ug/Kg		53	40 - 140
Benzidine	1670	399.0	J *-	ug/Kg		24	40 - 140
Benzoic acid	1670	443.3	*-	ug/Kg		27	30 - 130
Benzyl alcohol	1670	1074		ug/Kg		64	40 - 140
Bis(2-chloroethoxy)methane	1670	1054		ug/Kg		63	40 - 140
Bis(2-chloroethyl)ether	1670	1117		ug/Kg		67	40 - 140
bis (2-chloroisopropyl) ether	1670	998.5		ug/Kg		60	40 - 140
Bis(2-ethylhexyl) phthalate	1670	1399		ug/Kg		84	40 - 140
Butyl benzyl phthalate	1670	1403		ug/Kg		84	40 - 140
Carbazole	1670	951.1		ug/Kg		57	40 - 140
Dibenzofuran	1670	1326		ug/Kg		80	40 - 140
Diethyl phthalate	1670	1365		ug/Kg		82	40 - 140

Eurofins New England

QC Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 620-32927/2-A

Matrix: Solid

Analysis Batch: 32951

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 32927

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Dimethyl phthalate	1670	1367		ug/Kg		82	40 - 140
Di-n-butyl phthalate	1670	1373		ug/Kg		82	40 - 140
Di-n-octyl phthalate	1670	1433		ug/Kg		86	40 - 140
Hexachlorobenzene	1670	1358		ug/Kg		81	40 - 140
Hexachlorobutadiene	1670	1008		ug/Kg		61	40 - 140
Hexachlorocyclopentadiene	1670	974.9		ug/Kg		58	40 - 140
Hexachloroethane	1670	1115		ug/Kg		67	40 - 140
Isophorone	1670	1043		ug/Kg		63	40 - 140
Nitrobenzene	1670	1166		ug/Kg		70	40 - 140
N-Nitrosodimethylamine	1670	824.2		ug/Kg		49	40 - 140
N-Nitrosodi-n-propylamine	1670	1231		ug/Kg		74	40 - 140
N-Nitrosodiphenylamine	1670	1452		ug/Kg		87	40 - 140
Pentachloronitrobenzene	1670	1479		ug/Kg		89	40 - 140
Pentachlorophenol	1670	1067		ug/Kg		64	30 - 130
Phenol	1670	1197		ug/Kg		72	40 - 140
Pyridine	1670	582.1	*-	ug/Kg		35	40 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl (Surr)	75		30 - 130
2-Fluorophenol (Surr)	75		15 - 110
Nitrobenzene-d5 (Surr)	71		30 - 130
Phenol-d5 (Surr)	76		15 - 110
2,4,6-Tribromophenol (Surr)	77		15 - 110
Terphenyl-d14 (Surr)	77		30 - 130

Lab Sample ID: LCSD 620-32927/3-A

Matrix: Solid

Analysis Batch: 32951

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 32927

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2,4,5-Tetrachlorobenzene	1670	1135		ug/Kg		68	40 - 140	3	30
1,2,4-Trichlorobenzene	1670	1061		ug/Kg		64	40 - 140	7	30
1,2-Dichlorobenzene	1670	1074		ug/Kg		64	40 - 140	4	30
1,3-Dichlorobenzene	1670	1105		ug/Kg		66	40 - 140	6	30
1,4-Dichlorobenzene	1670	1110		ug/Kg		67	40 - 140	3	30
2,4,5-Trichlorophenol	1670	1186		ug/Kg		71	30 - 130	0	30
2,4,6-Trichlorophenol	1670	1295		ug/Kg		78	30 - 130	2	30
2,4-Dichlorophenol	1670	1129		ug/Kg		68	30 - 130	3	30
2,4-Dimethylphenol	1670	1091		ug/Kg		65	30 - 130	2	30
2,4-Dinitrophenol	1670	994.5		ug/Kg		60	30 - 130	3	30
2,4-Dinitrotoluene	1670	1436		ug/Kg		86	40 - 140	0	30
2,6-Dinitrotoluene	1670	1348		ug/Kg		81	40 - 140	1	30
2-Chloronaphthalene	1670	1240		ug/Kg		74	40 - 140	3	30
2-Chlorophenol	1670	1173		ug/Kg		70	30 - 130	3	30
2-Methylphenol	1670	1206		ug/Kg		72	30 - 130	2	30
2-Nitroaniline	1670	994.4		ug/Kg		60	40 - 140	1	30
2-Nitrophenol	1670	1066		ug/Kg		64	30 - 130	6	30
3 & 4 Methylphenol	1670	1217		ug/Kg		73	30 - 130	2	30

Eurofins New England

QC Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 620-32927/3-A

Matrix: Solid

Analysis Batch: 32951

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 32927

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
3,3'-Dichlorobenzidine	1670	1610		ug/Kg		97	40 - 140	2	30
3-Nitroaniline	1670	716.5		ug/Kg		43	40 - 140	2	30
4,6-Dinitro-2-methylphenol	1670	1193		ug/Kg		72	30 - 130	3	30
4-Bromophenyl phenyl ether	1670	1332		ug/Kg		80	40 - 140	0	30
4-Chloro-3-methylphenol	1670	1264		ug/Kg		76	30 - 130	3	30
4-Chloroaniline	1670	433.8	*-	ug/Kg		26	40 - 140	18	30
4-Chlorophenyl phenyl ether	1670	1388		ug/Kg		83	40 - 140	1	30
4-Nitroaniline	1670	969.4		ug/Kg		58	40 - 140	4	30
4-Nitrophenol	1670	1261		ug/Kg		76	30 - 130	4	30
Acetophenone	1670	1136		ug/Kg		68	40 - 140	4	30
Aniline	1670	545.3	*-	ug/Kg		33	40 - 140	11	30
Azobenzene/Diphenyldiazene	1670	871.0		ug/Kg		52	40 - 140	2	30
Benzidine	1670	391.4	J *-	ug/Kg		23	40 - 140	2	30
Benzoic acid	1670	392.4	*-	ug/Kg		24	30 - 130	12	30
Benzyl alcohol	1670	1052		ug/Kg		63	40 - 140	2	30
Bis(2-chloroethoxy)methane	1670	1011		ug/Kg		61	40 - 140	4	30
Bis(2-chloroethyl)ether	1670	1081		ug/Kg		65	40 - 140	3	30
bis (2-chloroisopropyl) ether	1670	972.2		ug/Kg		58	40 - 140	3	30
Bis(2-ethylhexyl) phthalate	1670	1465		ug/Kg		88	40 - 140	5	30
Butyl benzyl phthalate	1670	1454		ug/Kg		87	40 - 140	4	30
Carbazole	1670	987.3		ug/Kg		59	40 - 140	4	30
Dibenzofuran	1670	1342		ug/Kg		81	40 - 140	1	30
Diethyl phthalate	1670	1398		ug/Kg		84	40 - 140	2	30
Dimethyl phthalate	1670	1360		ug/Kg		82	40 - 140	0	30
Di-n-butyl phthalate	1670	1404		ug/Kg		84	40 - 140	2	30
Di-n-octyl phthalate	1670	1511		ug/Kg		91	40 - 140	5	30
Hexachlorobenzene	1670	1372		ug/Kg		82	40 - 140	1	30
Hexachlorobutadiene	1670	945.1		ug/Kg		57	40 - 140	6	30
Hexachlorocyclopentadiene	1670	956.8		ug/Kg		57	40 - 140	2	30
Hexachloroethane	1670	1065		ug/Kg		64	40 - 140	5	30
Isophorone	1670	990.8		ug/Kg		59	40 - 140	5	30
Nitrobenzene	1670	1108		ug/Kg		66	40 - 140	5	30
N-Nitrosodimethylamine	1670	813.7		ug/Kg		49	40 - 140	1	30
N-Nitrosodi-n-propylamine	1670	1218		ug/Kg		73	40 - 140	1	30
N-Nitrosodiphenylamine	1670	1454		ug/Kg		87	40 - 140	0	30
Pentachloronitrobenzene	1670	1494		ug/Kg		90	40 - 140	1	30
Pentachlorophenol	1670	1098		ug/Kg		66	30 - 130	3	30
Phenol	1670	1189		ug/Kg		71	40 - 140	1	30
Pyridine	1670	550.5	*-	ug/Kg		33	40 - 140	6	30

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
2-Fluorobiphenyl (Surr)	73		30 - 130
2-Fluorophenol (Surr)	75		15 - 110
Nitrobenzene-d5 (Surr)	68		30 - 130
Phenol-d5 (Surr)	75		15 - 110
2,4,6-Tribromophenol (Surr)	79		15 - 110
Terphenyl-d14 (Surr)	85		30 - 130

Eurofins New England

QC Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Lab Sample ID: MB 620-32927/1-A

Matrix: Solid

Analysis Batch: 32952

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 32927

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		16.0	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Acenaphthylene	ND		16.0	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
1-Methylnaphthalene	ND		16.0	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Anthracene	ND		16.0	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Benzo[a]anthracene	ND		16.0	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Benzo[a]pyrene	ND		16.0	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Benzo[b]fluoranthene	ND		16.0	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Benzo[g,h,i]perylene	ND		16.0	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Benzo[k]fluoranthene	ND		16.0	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Chrysene	ND		16.0	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Dibenz(a,h)anthracene	ND		16.0	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Fluoranthene	ND		16.0	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Fluorene	ND		16.0	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Indeno[1,2,3-cd]pyrene	ND		16.0	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
2-Methylnaphthalene	ND		16.0	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Naphthalene	ND		16.0	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Phenanthrene	ND		16.0	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Pyrene	ND		16.0	ug/Kg		03/21/24 08:36	03/21/24 13:46	1
Bis(2-ethylhexyl) phthalate	ND		33.3	ug/Kg		03/21/24 08:36	03/21/24 13:46	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	55		30 - 130	03/21/24 08:36	03/21/24 13:46	1
Terphenyl-d14 (Surr)	86		30 - 130	03/21/24 08:36	03/21/24 13:46	1
2-Fluorobiphenyl (Surr)	57		30 - 130	03/21/24 08:36	03/21/24 13:46	1

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

Lab Sample ID: MB 620-32878/1-A

Matrix: Solid

Analysis Batch: 32965

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 32878

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TEPH (C9-C36)	ND		13.3	mg/Kg		03/19/24 17:07	03/21/24 13:42	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane (Surr)	58		40 - 140	03/19/24 17:07	03/21/24 13:42	1
o-Terphenyl (Surr)	55		40 - 140	03/19/24 17:07	03/21/24 13:42	1

Lab Sample ID: LCS 620-32878/2-A

Matrix: Solid

Analysis Batch: 32965

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 32878

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
TEPH (C9-C36)	360	274.4		mg/Kg		76	30 - 100

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctadecane (Surr)	84		40 - 140
o-Terphenyl (Surr)	79		40 - 140

Eurofins New England

QC Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

Lab Sample ID: LCSD 620-32878/3-A

Matrix: Solid

Analysis Batch: 32965

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 32878

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
TEPH (C9-C36)	360	215.3		mg/Kg		60	30 - 100	24	30
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctadecane (Surr)	69		40 - 140						
o-Terphenyl (Surr)	64		40 - 140						

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 620-33090/1-A

Matrix: Solid

Analysis Batch: 33178

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 33090

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		1.50	mg/Kg		03/26/24 08:24	03/27/24 14:42	1
Barium	ND		1.00	mg/Kg		03/26/24 08:24	03/27/24 14:42	1
Cadmium	ND		0.500	mg/Kg		03/26/24 08:24	03/27/24 14:42	1
Chromium	ND		1.00	mg/Kg		03/26/24 08:24	03/27/24 14:42	1
Lead	ND		1.50	mg/Kg		03/26/24 08:24	03/27/24 14:42	1
Selenium	ND		1.50	mg/Kg		03/26/24 08:24	03/27/24 14:42	1
Silver	ND		1.50	mg/Kg		03/26/24 08:24	03/27/24 14:42	1

Lab Sample ID: LCSSRM 620-33090/2-A

Matrix: Solid

Analysis Batch: 33178

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 33090

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	223	189.0		mg/Kg		84.8	70.4 - 102.2
Barium	445	462.6		mg/Kg		104.0	78.0 - 110.8
Cadmium	226	235.6		mg/Kg		104.3	73.9 - 104.9
Chromium	230	206.4		mg/Kg		89.7	73.5 - 107.0
Lead	275	266.9		mg/Kg		97.1	74.2 - 108.0
Selenium	137	127.0		mg/Kg		92.7	70.9 - 108.8
Silver	75.3	58.60		mg/Kg		77.8	72.0 - 110.1

Lab Sample ID: 620-17450-7 MS

Matrix: Solid

Analysis Batch: 33178

Client Sample ID: Comp (0-5)

Prep Type: Total/NA

Prep Batch: 33090

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	ND	F1	100	75.72	F1	mg/Kg	⊛	73	75 - 125
Cadmium	ND		100	79.83		mg/Kg	⊛	80	75 - 125
Chromium	13.6	F1	100	86.58	F1	mg/Kg	⊛	73	75 - 125
Lead	21.0		100	98.74		mg/Kg	⊛	78	75 - 125
Selenium	ND	F1	100	72.55	F1	mg/Kg	⊛	73	75 - 125

Eurofins New England

QC Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: 6010D - Metals (ICP) (Continued)

Lab Sample ID: 620-17450-7 MS

Matrix: Solid

Analysis Batch: 33178

Client Sample ID: Comp (0-5)

Prep Type: Total/NA

Prep Batch: 33090

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	ND	F1	100	46.65	F1	mg/Kg	✱	47	75 - 125

Lab Sample ID: 620-17450-7 MSD

Matrix: Solid

Analysis Batch: 33178

Client Sample ID: Comp (0-5)

Prep Type: Total/NA

Prep Batch: 33090

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Arsenic	ND	F1	92.8	85.32		mg/Kg	✱	89	75 - 125	12	20
Barium	45.9		92.8	147.8		mg/Kg	✱	110	75 - 125	6	20
Cadmium	ND		92.8	88.13		mg/Kg	✱	95	75 - 125	10	20
Chromium	13.6	F1	92.8	95.99		mg/Kg	✱	89	75 - 125	10	20
Lead	21.0		92.8	101.7		mg/Kg	✱	87	75 - 125	3	20
Selenium	ND	F1	92.8	80.90		mg/Kg	✱	87	75 - 125	11	20
Silver	ND	F1	92.9	44.43	F1	mg/Kg	✱	48	75 - 125	5	20

Lab Sample ID: 620-17450-7 DU

Matrix: Solid

Analysis Batch: 33178

Client Sample ID: Comp (0-5)

Prep Type: Total/NA

Prep Batch: 33090

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Arsenic	ND	F1	ND		mg/Kg	✱	NC	20
Cadmium	ND		ND		mg/Kg	✱	NC	20
Chromium	13.6	F1	12.73		mg/Kg	✱	7	20
Lead	21.0		25.81		mg/Kg	✱	20	20
Selenium	ND	F1	ND		mg/Kg	✱	NC	20
Silver	ND	F1	ND		mg/Kg	✱	NC	20

Lab Sample ID: MB 620-33121/1-A

Matrix: Solid

Analysis Batch: 33178

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 33121

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0150	mg/L		03/26/24 15:40	03/27/24 13:11	1

Lab Sample ID: LCS 620-33121/2-A

Matrix: Solid

Analysis Batch: 33178

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 33121

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	2.00	1.976		mg/L		99	80 - 120

Lab Sample ID: LB 620-32864/1-B

Matrix: Solid

Analysis Batch: 33178

Client Sample ID: Method Blank

Prep Type: TCLP

Prep Batch: 33121

Analyte	LB Result	LB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0150	mg/L		03/26/24 15:40	03/27/24 13:59	1

Eurofins New England

QC Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: 6010D - Metals (ICP) (Continued)

Lab Sample ID: 620-17450-8 MS

Matrix: Solid

Analysis Batch: 33178

Client Sample ID: Comp (5-10)

Prep Type: TCLP

Prep Batch: 33121

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Lead	ND		2.00	1.724		mg/L		86	75 - 125		

Lab Sample ID: 620-17450-8 MSD

Matrix: Solid

Analysis Batch: 33178

Client Sample ID: Comp (5-10)

Prep Type: TCLP

Prep Batch: 33121

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lead	ND		2.00	1.767		mg/L		88	75 - 125	2	20

Lab Sample ID: 620-17450-8 DU

Matrix: Solid

Analysis Batch: 33178

Client Sample ID: Comp (5-10)

Prep Type: TCLP

Prep Batch: 33121

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Lead	ND			ND		mg/L				NC	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 620-32865/1-A

Matrix: Solid

Analysis Batch: 32883

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 32865

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0500	mg/Kg		03/19/24 11:28	03/19/24 15:14	1

Lab Sample ID: LCSSRM 620-32865/2-A ^20

Matrix: Solid

Analysis Batch: 32883

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 32865

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	25.5	22.86		mg/Kg		89.6	71.4 - 125.1		

Method: 1010A - Ignitability, Pensky-Martens Closed-Cup Method

Lab Sample ID: LCS 410-485688/1

Matrix: Solid

Analysis Batch: 485688

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Flashpoint	81.0	80.00		Degrees F		99	96.9 - 103.1		

Lab Sample ID: LCSD 410-485688/2

Matrix: Solid

Analysis Batch: 485688

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Flashpoint	81.0	79.00		Degrees F		98	96.9 - 103.1	1	4

Eurofins New England

QC Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: 9012 - Cyanide, Reactive

Lab Sample ID: MB 410-486607/1-A

Matrix: Solid

Analysis Batch: 486903

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 486607

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Reactive	ND		60.0	mg/Kg		03/25/24 08:25	03/25/24 16:36	1

Lab Sample ID: LCS 410-486607/2-A

Matrix: Solid

Analysis Batch: 486903

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 486607

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Reactive	1000	ND		mg/Kg		3	0 - 5.14

Lab Sample ID: LCSD 410-486607/3-A

Matrix: Solid

Analysis Batch: 486903

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 486607

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Cyanide, Reactive	1000	ND		mg/Kg		3	0 - 5.14	11	11

Method: 9034 - Sulfide, Reactive

Lab Sample ID: MB 410-486607/1-A

Matrix: Solid

Analysis Batch: 486731

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 486607

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide, Reactive	ND		160	mg/Kg		03/25/24 08:25	03/25/24 12:45	1

Lab Sample ID: LCS 410-486607/26-A

Matrix: Solid

Analysis Batch: 486731

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 486607

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide, Reactive	538	394.3		mg/Kg		73	62 - 104

Lab Sample ID: LCSD 410-486607/27-A

Matrix: Solid

Analysis Batch: 486731

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 486607

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Sulfide, Reactive	538	404.2		mg/Kg		75	62 - 104	2	21

Method: 9045D - pH

Lab Sample ID: LCDSRM 620-33213/6

Matrix: Solid

Analysis Batch: 33213

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
pH	6.00	6.1		SU		100.8	97.5 - 102.5	1	5

Eurofins New England

QC Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: 9045D - pH (Continued)

Lab Sample ID: LCSSRM 620-33213/5

Matrix: Solid

Analysis Batch: 33213

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
pH	6.00	6.0		SU		100.2	97.5 - 102.5

Lab Sample ID: MB 620-33195/1-A

Matrix: Solid

Analysis Batch: 33213

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.6			SU			03/28/24 11:32	1
Temperature	23.4			Degrees C			03/28/24 11:32	1

Lab Sample ID: 620-17450-7 DU

Matrix: Solid

Analysis Batch: 33213

Client Sample ID: Comp (0-5)

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	8.4		8.6		SU		2	5
Temperature	23.4		23.4		Degrees C		0	5

Method: 9060 - Organic Carbon, Total (TOC)

Lab Sample ID: MB 410-485914/4

Matrix: Solid

Analysis Batch: 485914

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	ND		300	mg/Kg			03/21/24 12:15	1

Lab Sample ID: LCS 410-485914/3

Matrix: Solid

Analysis Batch: 485914

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon	3920	4950		mg/Kg		126	36 - 163

Lab Sample ID: 620-17450-7 MS

Matrix: Solid

Analysis Batch: 485914

Client Sample ID: Comp (0-5)

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon	4780	F1	177000	24340	F1	mg/Kg		11	36 - 163

Lab Sample ID: 620-17450-7 MSD

Matrix: Solid

Analysis Batch: 485914

Client Sample ID: Comp (0-5)

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Organic Carbon	4780	F1	17500	23530		mg/Kg		107	36 - 163	3	20

Eurofins New England

QC Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method: SM 2510B - Conductivity, Specific Conductance

Lab Sample ID: LCDSRM 620-33209/3
Matrix: Solid
Analysis Batch: 33209

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Specific Conductance	1410	1405		uS/cm		99.4	95.0 - 105.0	0	20

Lab Sample ID: LCSSRM 620-33209/2
Matrix: Solid
Analysis Batch: 33209

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Specific Conductance	1410	1402		uS/cm		99.2	95.0 - 105.0	0	

Lab Sample ID: MB 620-33195/1-A
Matrix: Solid
Analysis Batch: 33209

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	ND		10.0	uS/cm			03/28/24 11:04	1

Lab Sample ID: 620-17450-7 DU
Matrix: Solid
Analysis Batch: 33209

Client Sample ID: Comp (0-5)
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Specific Conductance	1200		1171		uS/cm		2	5

QC Association Summary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

GC/MS VOA

Pre Prep Batch: 32834

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-1	ATC-3 (0-5)	Total/NA	Solid	Frozen Preserve	
620-17450-2	ATC-3 (5-10)	Total/NA	Solid	Frozen Preserve	
620-17450-3	ATC-2 (0-5)	Total/NA	Solid	Frozen Preserve	
620-17450-4	ATC-2 (5-10)	Total/NA	Solid	Frozen Preserve	
620-17450-5	ATC-1 (0-5)	Total/NA	Solid	Frozen Preserve	
620-17450-6	ATC-1 (5-10)	Total/NA	Solid	Frozen Preserve	
620-17450-9	ATC-8 (0-5)	Total/NA	Solid	Frozen Preserve	
620-17450-10	ATC-8 (5-10)	Total/NA	Solid	Frozen Preserve	
620-17450-11	ATC-7 (0-5)	Total/NA	Solid	Frozen Preserve	
620-17450-12	ATC-7 (5-10)	Total/NA	Solid	Frozen Preserve	
620-17450-13	ATC-6 (0-5)	Total/NA	Solid	Frozen Preserve	
620-17450-14	ATC-6 (5-10)	Total/NA	Solid	Frozen Preserve	
620-17450-15	ATC-4 (0-5)	Total/NA	Solid	Frozen Preserve	
620-17450-16	ATC-4 (5-10)	Total/NA	Solid	Frozen Preserve	
620-17450-17	ATC-5 (0-5)	Total/NA	Solid	Frozen Preserve	
620-17450-18	ATC-5 (5-10)	Total/NA	Solid	Frozen Preserve	

Prep Batch: 33086

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-1	ATC-3 (0-5)	Total/NA	Solid	5035	32834
620-17450-2	ATC-3 (5-10)	Total/NA	Solid	5035	32834
620-17450-3	ATC-2 (0-5)	Total/NA	Solid	5035	32834
620-17450-4	ATC-2 (5-10)	Total/NA	Solid	5035	32834
620-17450-5	ATC-1 (0-5)	Total/NA	Solid	5035	32834
620-17450-6	ATC-1 (5-10)	Total/NA	Solid	5035	32834
620-17450-9	ATC-8 (0-5)	Total/NA	Solid	5035	32834
620-17450-10	ATC-8 (5-10)	Total/NA	Solid	5035	32834
620-17450-11	ATC-7 (0-5)	Total/NA	Solid	5035	32834
620-17450-12	ATC-7 (5-10)	Total/NA	Solid	5035	32834
620-17450-13	ATC-6 (0-5)	Total/NA	Solid	5035	32834
620-17450-14	ATC-6 (5-10)	Total/NA	Solid	5035	32834
620-17450-15	ATC-4 (0-5)	Total/NA	Solid	5035	32834
620-17450-16	ATC-4 (5-10)	Total/NA	Solid	5035	32834
620-17450-17	ATC-5 (0-5)	Total/NA	Solid	5035	32834
620-17450-18	ATC-5 (5-10)	Total/NA	Solid	5035	32834
MB 620-33086/3-A	Method Blank	Total/NA	Solid	5035	
LCS 620-33086/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 620-33086/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Eurofins New England

QC Association Summary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

GC/MS VOA

Analysis Batch: 33087

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-1	ATC-3 (0-5)	Total/NA	Solid	8260C	33086
620-17450-2	ATC-3 (5-10)	Total/NA	Solid	8260C	33086
620-17450-3	ATC-2 (0-5)	Total/NA	Solid	8260C	33086
620-17450-4	ATC-2 (5-10)	Total/NA	Solid	8260C	33086
620-17450-5	ATC-1 (0-5)	Total/NA	Solid	8260C	33086
620-17450-6	ATC-1 (5-10)	Total/NA	Solid	8260C	33086
620-17450-9	ATC-8 (0-5)	Total/NA	Solid	8260C	33086
620-17450-10	ATC-8 (5-10)	Total/NA	Solid	8260C	33086
620-17450-11	ATC-7 (0-5)	Total/NA	Solid	8260C	33086
620-17450-12	ATC-7 (5-10)	Total/NA	Solid	8260C	33086
620-17450-13	ATC-6 (0-5)	Total/NA	Solid	8260C	33086
620-17450-14	ATC-6 (5-10)	Total/NA	Solid	8260C	33086
620-17450-15	ATC-4 (0-5)	Total/NA	Solid	8260C	33086
620-17450-16	ATC-4 (5-10)	Total/NA	Solid	8260C	33086
620-17450-17	ATC-5 (0-5)	Total/NA	Solid	8260C	33086
620-17450-18	ATC-5 (5-10)	Total/NA	Solid	8260C	33086
MB 620-33086/3-A	Method Blank	Total/NA	Solid	8260C	33086
LCS 620-33086/1-A	Lab Control Sample	Total/NA	Solid	8260C	33086
LCSD 620-33086/2-A	Lab Control Sample Dup	Total/NA	Solid	8260C	33086

GC/MS Semi VOA

Prep Batch: 32927

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	Total/NA	Solid	3546	
620-17450-8	Comp (5-10)	Total/NA	Solid	3546	
MB 620-32927/1-A	Method Blank	Total/NA	Solid	3546	
LCS 620-32927/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 620-32927/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	

Analysis Batch: 32951

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	Total/NA	Solid	8270D	32927
620-17450-8	Comp (5-10)	Total/NA	Solid	8270D	32927
MB 620-32927/1-A	Method Blank	Total/NA	Solid	8270D	32927
LCS 620-32927/2-A	Lab Control Sample	Total/NA	Solid	8270D	32927
LCSD 620-32927/3-A	Lab Control Sample Dup	Total/NA	Solid	8270D	32927

Analysis Batch: 32952

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	Total/NA	Solid	8270D_LL_PAH	32927
620-17450-8	Comp (5-10)	Total/NA	Solid	8270D_LL_PAH	32927
MB 620-32927/1-A	Method Blank	Total/NA	Solid	8270D_LL_PAH	32927

GC Semi VOA

Prep Batch: 32873

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	Total/NA	Solid	3540C	
620-17450-8	Comp (5-10)	Total/NA	Solid	3540C	

Eurofins New England

QC Association Summary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

GC Semi VOA

Prep Batch: 32878

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	Total/NA	Solid	3546	
620-17450-8	Comp (5-10)	Total/NA	Solid	3546	
MB 620-32878/1-A	Method Blank	Total/NA	Solid	3546	
LCS 620-32878/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 620-32878/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	

Analysis Batch: 32965

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	Total/NA	Solid	8100	32878
620-17450-8	Comp (5-10)	Total/NA	Solid	8100	32878
MB 620-32878/1-A	Method Blank	Total/NA	Solid	8100	32878
LCS 620-32878/2-A	Lab Control Sample	Total/NA	Solid	8100	32878
LCSD 620-32878/3-A	Lab Control Sample Dup	Total/NA	Solid	8100	32878

Analysis Batch: 32987

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	Total/NA	Solid	8082	32873
620-17450-8	Comp (5-10)	Total/NA	Solid	8082	32873

Metals

Leach Batch: 32864

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	TCLP	Solid	1311	
620-17450-8	Comp (5-10)	TCLP	Solid	1311	
LB 620-32864/1-B	Method Blank	TCLP	Solid	1311	
620-17450-8 MS	Comp (5-10)	TCLP	Solid	1311	
620-17450-8 MSD	Comp (5-10)	TCLP	Solid	1311	
620-17450-8 DU	Comp (5-10)	TCLP	Solid	1311	

Prep Batch: 32865

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	Total/NA	Solid	7471B	
620-17450-8	Comp (5-10)	Total/NA	Solid	7471B	
MB 620-32865/1-A	Method Blank	Total/NA	Solid	7471B	
LCSSRM 620-32865/2-A ^20	Lab Control Sample	Total/NA	Solid	7471B	

Analysis Batch: 32883

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	Total/NA	Solid	7471A	32865
620-17450-8	Comp (5-10)	Total/NA	Solid	7471A	32865
MB 620-32865/1-A	Method Blank	Total/NA	Solid	7471A	32865
LCSSRM 620-32865/2-A ^20	Lab Control Sample	Total/NA	Solid	7471A	32865

Prep Batch: 33090

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	Total/NA	Solid	3050B	
620-17450-8	Comp (5-10)	Total/NA	Solid	3050B	
MB 620-33090/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 620-33090/2-A	Lab Control Sample	Total/NA	Solid	3050B	
620-17450-7 MS	Comp (0-5)	Total/NA	Solid	3050B	

Eurofins New England

QC Association Summary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Metals (Continued)

Prep Batch: 33090 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7 MSD	Comp (0-5)	Total/NA	Solid	3050B	
620-17450-7 DU	Comp (0-5)	Total/NA	Solid	3050B	

Prep Batch: 33121

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	TCLP	Solid	3010A	32864
620-17450-8	Comp (5-10)	TCLP	Solid	3010A	32864
LB 620-32864/1-B	Method Blank	TCLP	Solid	3010A	32864
MB 620-33121/1-A	Method Blank	Total/NA	Solid	3010A	
LCS 620-33121/2-A	Lab Control Sample	Total/NA	Solid	3010A	
620-17450-8 MS	Comp (5-10)	TCLP	Solid	3010A	32864
620-17450-8 MSD	Comp (5-10)	TCLP	Solid	3010A	32864
620-17450-8 DU	Comp (5-10)	TCLP	Solid	3010A	32864

Analysis Batch: 33178

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	TCLP	Solid	6010D	33121
620-17450-7	Comp (0-5)	Total/NA	Solid	6010D	33090
620-17450-8	Comp (5-10)	TCLP	Solid	6010D	33121
620-17450-8	Comp (5-10)	Total/NA	Solid	6010D	33090
LB 620-32864/1-B	Method Blank	TCLP	Solid	6010D	33121
MB 620-33090/1-A	Method Blank	Total/NA	Solid	6010D	33090
MB 620-33121/1-A	Method Blank	Total/NA	Solid	6010D	33121
LCS 620-33121/2-A	Lab Control Sample	Total/NA	Solid	6010D	33121
LCSSRM 620-33090/2-A	Lab Control Sample	Total/NA	Solid	6010D	33090
620-17450-7 MS	Comp (0-5)	Total/NA	Solid	6010D	33090
620-17450-7 MSD	Comp (0-5)	Total/NA	Solid	6010D	33090
620-17450-8 MS	Comp (5-10)	TCLP	Solid	6010D	33121
620-17450-8 MSD	Comp (5-10)	TCLP	Solid	6010D	33121
620-17450-7 DU	Comp (0-5)	Total/NA	Solid	6010D	33090
620-17450-8 DU	Comp (5-10)	TCLP	Solid	6010D	33121

General Chemistry

Analysis Batch: 32837

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-1	ATC-3 (0-5)	Total/NA	Solid	Moisture	
620-17450-2	ATC-3 (5-10)	Total/NA	Solid	Moisture	
620-17450-3	ATC-2 (0-5)	Total/NA	Solid	Moisture	
620-17450-4	ATC-2 (5-10)	Total/NA	Solid	Moisture	
620-17450-5	ATC-1 (0-5)	Total/NA	Solid	Moisture	
620-17450-6	ATC-1 (5-10)	Total/NA	Solid	Moisture	
620-17450-7	Comp (0-5)	Total/NA	Solid	Moisture	
620-17450-8	Comp (5-10)	Total/NA	Solid	Moisture	
620-17450-9	ATC-8 (0-5)	Total/NA	Solid	Moisture	
620-17450-10	ATC-8 (5-10)	Total/NA	Solid	Moisture	
620-17450-11	ATC-7 (0-5)	Total/NA	Solid	Moisture	
620-17450-12	ATC-7 (5-10)	Total/NA	Solid	Moisture	
620-17450-13	ATC-6 (0-5)	Total/NA	Solid	Moisture	
620-17450-14	ATC-6 (5-10)	Total/NA	Solid	Moisture	
MB 620-32837/1	Method Blank	Total/NA	Solid	Moisture	

Eurofins New England

QC Association Summary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

General Chemistry (Continued)

Analysis Batch: 32837 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-8 DU	Comp (5-10)	Total/NA	Solid	Moisture	

Analysis Batch: 32858

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-15	ATC-4 (0-5)	Total/NA	Solid	Moisture	
620-17450-16	ATC-4 (5-10)	Total/NA	Solid	Moisture	
620-17450-17	ATC-5 (0-5)	Total/NA	Solid	Moisture	
620-17450-18	ATC-5 (5-10)	Total/NA	Solid	Moisture	
MB 620-32858/1	Method Blank	Total/NA	Solid	Moisture	
620-17450-15 DU	ATC-4 (0-5)	Total/NA	Solid	Moisture	

Leach Batch: 33195

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	Soluble	Solid	DI Leach	
620-17450-8	Comp (5-10)	Soluble	Solid	DI Leach	
MB 620-33195/1-A	Method Blank	Soluble	Solid	DI Leach	
620-17450-7 DU	Comp (0-5)	Soluble	Solid	DI Leach	

Analysis Batch: 33209

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	Soluble	Solid	SM 2510B	33195
620-17450-8	Comp (5-10)	Soluble	Solid	SM 2510B	33195
MB 620-33195/1-A	Method Blank	Soluble	Solid	SM 2510B	33195
LCDSRM 620-33209/3	Lab Control Sample Dup	Total/NA	Solid	SM 2510B	
LCSSRM 620-33209/2	Lab Control Sample	Total/NA	Solid	SM 2510B	
620-17450-7 DU	Comp (0-5)	Soluble	Solid	SM 2510B	33195

Analysis Batch: 33213

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	Soluble	Solid	9045D	33195
620-17450-8	Comp (5-10)	Soluble	Solid	9045D	33195
MB 620-33195/1-A	Method Blank	Soluble	Solid	9045D	33195
LCDSRM 620-33213/6	Lab Control Sample Dup	Total/NA	Solid	9045D	
LCSSRM 620-33213/5	Lab Control Sample	Total/NA	Solid	9045D	
620-17450-7 DU	Comp (0-5)	Soluble	Solid	9045D	33195

Analysis Batch: 485688

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	Total/NA	Solid	1010A	
620-17450-8	Comp (5-10)	Total/NA	Solid	1010A	
LCS 410-485688/1	Lab Control Sample	Total/NA	Solid	1010A	
LCSD 410-485688/2	Lab Control Sample Dup	Total/NA	Solid	1010A	

Analysis Batch: 485914

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	Total/NA	Solid	9060	
620-17450-8	Comp (5-10)	Total/NA	Solid	9060	
MB 410-485914/4	Method Blank	Total/NA	Solid	9060	
LCS 410-485914/3	Lab Control Sample	Total/NA	Solid	9060	
620-17450-7 MS	Comp (0-5)	Total/NA	Solid	9060	
620-17450-7 MSD	Comp (0-5)	Total/NA	Solid	9060	

Eurofins New England

QC Association Summary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

General Chemistry

Prep Batch: 486607

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	Total/NA	Solid	7.3.4	
620-17450-8	Comp (5-10)	Total/NA	Solid	7.3.4	
MB 410-486607/1-A	Method Blank	Total/NA	Solid	7.3.4	
LCS 410-486607/26-A	Lab Control Sample	Total/NA	Solid	7.3.4	
LCS 410-486607/2-A	Lab Control Sample	Total/NA	Solid	7.3.4	
LCSD 410-486607/27-A	Lab Control Sample Dup	Total/NA	Solid	7.3.4	
LCSD 410-486607/3-A	Lab Control Sample Dup	Total/NA	Solid	7.3.4	

Analysis Batch: 486731

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	Total/NA	Solid	9034	486607
620-17450-8	Comp (5-10)	Total/NA	Solid	9034	486607
MB 410-486607/1-A	Method Blank	Total/NA	Solid	9034	486607
LCS 410-486607/26-A	Lab Control Sample	Total/NA	Solid	9034	486607
LCSD 410-486607/27-A	Lab Control Sample Dup	Total/NA	Solid	9034	486607

Analysis Batch: 486903

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-17450-7	Comp (0-5)	Total/NA	Solid	9012	486607
620-17450-8	Comp (5-10)	Total/NA	Solid	9012	486607
MB 410-486607/1-A	Method Blank	Total/NA	Solid	9012	486607
LCS 410-486607/2-A	Lab Control Sample	Total/NA	Solid	9012	486607
LCSD 410-486607/3-A	Lab Control Sample Dup	Total/NA	Solid	9012	486607

Lab Chronicle

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-3 (0-5)

Date Collected: 03/15/24 09:10

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	32837	MEM	EET NE	03/19/24 07:42

Client Sample ID: ATC-3 (0-5)

Date Collected: 03/15/24 09:10

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-1

Matrix: Solid

Percent Solids: 88.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	Frozen Preserve			32834	KFS	EET NE	03/15/24 15:00
Total/NA	Prep	5035			33086	CLR	EET NE	03/26/24 07:37
Total/NA	Analysis	8260C		1	33087	CLR	EET NE	03/26/24 12:08

Client Sample ID: ATC-3 (5-10)

Date Collected: 03/15/24 09:30

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	32837	MEM	EET NE	03/19/24 07:42

Client Sample ID: ATC-3 (5-10)

Date Collected: 03/15/24 09:30

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-2

Matrix: Solid

Percent Solids: 87.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	Frozen Preserve			32834	KFS	EET NE	03/15/24 15:00
Total/NA	Prep	5035			33086	CLR	EET NE	03/26/24 07:37
Total/NA	Analysis	8260C		1	33087	CLR	EET NE	03/26/24 12:33

Client Sample ID: ATC-2 (0-5)

Date Collected: 03/15/24 10:15

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	32837	MEM	EET NE	03/19/24 07:42

Client Sample ID: ATC-2 (0-5)

Date Collected: 03/15/24 10:15

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-3

Matrix: Solid

Percent Solids: 90.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	Frozen Preserve			32834	KFS	EET NE	03/15/24 15:00
Total/NA	Prep	5035			33086	CLR	EET NE	03/26/24 07:37
Total/NA	Analysis	8260C		1	33087	CLR	EET NE	03/26/24 12:58

Lab Chronicle

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-2 (5-10)

Date Collected: 03/15/24 11:00

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	32837	MEM	EET NE	03/19/24 07:42

Client Sample ID: ATC-2 (5-10)

Date Collected: 03/15/24 11:00

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-4

Matrix: Solid

Percent Solids: 77.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	Frozen Preserve			32834	KFS	EET NE	03/15/24 15:00
Total/NA	Prep	5035			33086	CLR	EET NE	03/26/24 07:37
Total/NA	Analysis	8260C		1	33087	CLR	EET NE	03/26/24 13:23

Client Sample ID: ATC-1 (0-5)

Date Collected: 03/15/24 11:20

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	32837	MEM	EET NE	03/19/24 07:42

Client Sample ID: ATC-1 (0-5)

Date Collected: 03/15/24 11:20

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-5

Matrix: Solid

Percent Solids: 88.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	Frozen Preserve			32834	KFS	EET NE	03/15/24 15:00
Total/NA	Prep	5035			33086	CLR	EET NE	03/26/24 07:37
Total/NA	Analysis	8260C		1	33087	CLR	EET NE	03/26/24 13:49

Client Sample ID: ATC-1 (5-10)

Date Collected: 03/15/24 11:30

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-6

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	32837	MEM	EET NE	03/19/24 07:42

Client Sample ID: ATC-1 (5-10)

Date Collected: 03/15/24 11:30

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-6

Matrix: Solid

Percent Solids: 91.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	Frozen Preserve			32834	KFS	EET NE	03/15/24 15:00
Total/NA	Prep	5035			33086	CLR	EET NE	03/26/24 07:37
Total/NA	Analysis	8260C		1	33087	CLR	EET NE	03/26/24 14:14

Eurofins New England

Lab Chronicle

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: Comp (0-5)

Date Collected: 03/15/24 12:00

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
TCLP	Leach	1311			32864	MEM	EET NE	03/19/24 10:35 - 03/20/24 09:30 ¹
TCLP	Prep	3010A			33121	JPC	EET NE	03/26/24 15:40
TCLP	Analysis	6010D		1	33178	JPC	EET NE	03/27/24 13:47
Total/NA	Analysis	1010A		1	485688	USAE	ELLE	03/21/24 10:01 - 03/21/24 10:01 ¹
Total/NA	Prep	7.3.4			486607	USE1	ELLE	03/25/24 08:25
Total/NA	Analysis	9012		1	486903	JCG7	ELLE	03/25/24 17:06
Total/NA	Prep	7.3.4			486607	USE1	ELLE	03/25/24 08:25
Total/NA	Analysis	9034		1	486731	USE1	ELLE	03/25/24 12:45
Soluble	Leach	DI Leach			33195	ODO	EET NE	03/28/24 10:08
Soluble	Analysis	9045D		1	33213	ODO	EET NE	03/28/24 11:32
Total/NA	Analysis	9060		1	485914	P684	ELLE	03/21/24 13:08
Total/NA	Analysis	Moisture		1	32837	MEM	EET NE	03/19/24 07:42
Soluble	Leach	DI Leach			33195	ODO	EET NE	03/28/24 10:08
Soluble	Analysis	SM 2510B		1	33209	ODO	EET NE	03/28/24 11:04

Client Sample ID: Comp (0-5)

Date Collected: 03/15/24 12:00

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-7

Matrix: Solid

Percent Solids: 87.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3546			32927	JAC	EET NE	03/21/24 08:36
Total/NA	Analysis	8270D		1	32951	JS	EET NE	03/21/24 15:49
Total/NA	Prep	3546			32927	JAC	EET NE	03/21/24 08:36
Total/NA	Analysis	8270D_LL_PAH		1	32952	JS	EET NE	03/21/24 15:49
Total/NA	Prep	3540C			32873	JAC	EET NE	03/19/24 14:48
Total/NA	Analysis	8082		1	32987	BMH	EET NE	03/21/24 23:56
Total/NA	Prep	3546			32878	JAC	EET NE	03/19/24 17:07
Total/NA	Analysis	8100		1	32965	JS	EET NE	03/21/24 15:35
Total/NA	Prep	3050B			33090	PRB	EET NE	03/26/24 08:24
Total/NA	Analysis	6010D		2	33178	JPC	EET NE	03/27/24 14:54
Total/NA	Prep	7471B			32865	PRB	EET NE	03/19/24 11:28
Total/NA	Analysis	7471A		1	32883	PRB	EET NE	03/19/24 15:44

Client Sample ID: Comp (5-10)

Date Collected: 03/15/24 12:15

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-8

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
TCLP	Leach	1311			32864	MEM	EET NE	03/19/24 10:35 - 03/20/24 09:30 ¹
TCLP	Prep	3010A			33121	JPC	EET NE	03/26/24 15:40
TCLP	Analysis	6010D		1	33178	JPC	EET NE	03/27/24 13:23
Total/NA	Analysis	1010A		1	485688	USAE	ELLE	03/21/24 10:01 - 03/21/24 10:01 ¹
Total/NA	Prep	7.3.4			486607	USE1	ELLE	03/25/24 08:25
Total/NA	Analysis	9012		1	486903	JCG7	ELLE	03/25/24 17:07

Eurofins New England

Lab Chronicle

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: Comp (5-10)

Date Collected: 03/15/24 12:15

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-8

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7.3.4			486607	USE1	ELLE	03/25/24 08:25
Total/NA	Analysis	9034		1	486731	USE1	ELLE	03/25/24 12:45
Soluble	Leach	DI Leach			33195	ODO	EET NE	03/28/24 10:08
Soluble	Analysis	9045D		1	33213	ODO	EET NE	03/28/24 11:32
Total/NA	Analysis	9060		1	485914	P684	ELLE	03/21/24 13:29
Total/NA	Analysis	Moisture		1	32837	MEM	EET NE	03/19/24 07:42
Soluble	Leach	DI Leach			33195	ODO	EET NE	03/28/24 10:08
Soluble	Analysis	SM 2510B		1	33209	ODO	EET NE	03/28/24 11:04

Client Sample ID: Comp (5-10)

Date Collected: 03/15/24 12:15

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-8

Matrix: Solid

Percent Solids: 87.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3546			32927	JAC	EET NE	03/21/24 08:36
Total/NA	Analysis	8270D		1	32951	JS	EET NE	03/21/24 16:14
Total/NA	Prep	3546			32927	JAC	EET NE	03/21/24 08:36
Total/NA	Analysis	8270D_LL_PAH		1	32952	JS	EET NE	03/21/24 16:14
Total/NA	Prep	3540C			32873	JAC	EET NE	03/19/24 14:48
Total/NA	Analysis	8082		1	32987	BMH	EET NE	03/22/24 00:14
Total/NA	Prep	3546			32878	JAC	EET NE	03/19/24 17:07
Total/NA	Analysis	8100		1	32965	JS	EET NE	03/21/24 15:57
Total/NA	Prep	3050B			33090	PRB	EET NE	03/26/24 08:24
Total/NA	Analysis	6010D		2	33178	JPC	EET NE	03/27/24 15:18
Total/NA	Prep	7471B			32865	PRB	EET NE	03/19/24 11:28
Total/NA	Analysis	7471A		1	32883	PRB	EET NE	03/19/24 15:46

Client Sample ID: ATC-8 (0-5)

Date Collected: 03/14/24 10:00

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-9

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	32837	MEM	EET NE	03/19/24 07:42

Client Sample ID: ATC-8 (0-5)

Date Collected: 03/14/24 10:00

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-9

Matrix: Solid

Percent Solids: 88.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	Frozen Preserve			32834	KFS	EET NE	03/14/24 15:00
Total/NA	Prep	5035			33086	CLR	EET NE	03/26/24 07:37
Total/NA	Analysis	8260C		1	33087	CLR	EET NE	03/26/24 14:40

Eurofins New England

Lab Chronicle

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-8 (5-10)

Date Collected: 03/14/24 11:50

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-10

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	32837	MEM	EET NE	03/19/24 07:42

Client Sample ID: ATC-8 (5-10)

Date Collected: 03/14/24 11:50

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-10

Matrix: Solid

Percent Solids: 77.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	Frozen Preserve			32834	KFS	EET NE	03/14/24 15:00
Total/NA	Prep	5035			33086	CLR	EET NE	03/26/24 07:37
Total/NA	Analysis	8260C		1	33087	CLR	EET NE	03/26/24 15:06

Client Sample ID: ATC-7 (0-5)

Date Collected: 03/14/24 11:10

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-11

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	32837	MEM	EET NE	03/19/24 07:42

Client Sample ID: ATC-7 (0-5)

Date Collected: 03/14/24 11:10

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-11

Matrix: Solid

Percent Solids: 91.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	Frozen Preserve			32834	KFS	EET NE	03/14/24 15:00
Total/NA	Prep	5035			33086	CLR	EET NE	03/26/24 07:37
Total/NA	Analysis	8260C		1	33087	CLR	EET NE	03/26/24 15:31

Client Sample ID: ATC-7 (5-10)

Date Collected: 03/14/24 12:10

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-12

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	32837	MEM	EET NE	03/19/24 07:42

Client Sample ID: ATC-7 (5-10)

Date Collected: 03/14/24 12:10

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-12

Matrix: Solid

Percent Solids: 78.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	Frozen Preserve			32834	KFS	EET NE	03/14/24 15:00
Total/NA	Prep	5035			33086	CLR	EET NE	03/26/24 07:37
Total/NA	Analysis	8260C		1	33087	CLR	EET NE	03/26/24 15:57

Eurofins New England

Lab Chronicle

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-6 (0-5)

Date Collected: 03/14/24 12:30

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-13

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	32837	MEM	EET NE	03/19/24 07:42

Client Sample ID: ATC-6 (0-5)

Date Collected: 03/14/24 12:30

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-13

Matrix: Solid

Percent Solids: 89.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	Frozen Preserve			32834	KFS	EET NE	03/14/24 15:00
Total/NA	Prep	5035			33086	CLR	EET NE	03/26/24 07:37
Total/NA	Analysis	8260C		1	33087	CLR	EET NE	03/26/24 16:24

Client Sample ID: ATC-6 (5-10)

Date Collected: 03/14/24 12:45

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-14

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	32837	MEM	EET NE	03/19/24 07:42

Client Sample ID: ATC-6 (5-10)

Date Collected: 03/14/24 12:45

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-14

Matrix: Solid

Percent Solids: 92.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	Frozen Preserve			32834	KFS	EET NE	03/14/24 15:00
Total/NA	Prep	5035			33086	CLR	EET NE	03/26/24 07:37
Total/NA	Analysis	8260C		1	33087	CLR	EET NE	03/26/24 16:50

Client Sample ID: ATC-4 (0-5)

Date Collected: 03/14/24 13:40

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-15

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	32858	MEM	EET NE	03/19/24 09:21

Client Sample ID: ATC-4 (0-5)

Date Collected: 03/14/24 13:40

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-15

Matrix: Solid

Percent Solids: 89.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	Frozen Preserve			32834	KFS	EET NE	03/14/24 15:00
Total/NA	Prep	5035			33086	CLR	EET NE	03/26/24 07:37
Total/NA	Analysis	8260C		1	33087	CLR	EET NE	03/26/24 17:15

Eurofins New England

Lab Chronicle

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Client Sample ID: ATC-4 (5-10)

Date Collected: 03/14/24 13:55

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-16

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	32858	MEM	EET NE	03/19/24 09:21

Client Sample ID: ATC-4 (5-10)

Date Collected: 03/14/24 13:55

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-16

Matrix: Solid

Percent Solids: 92.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	Frozen Preserve			32834	KFS	EET NE	03/14/24 15:00
Total/NA	Prep	5035			33086	CLR	EET NE	03/26/24 07:37
Total/NA	Analysis	8260C		1	33087	CLR	EET NE	03/26/24 17:41

Client Sample ID: ATC-5 (0-5)

Date Collected: 03/14/24 14:25

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-17

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	32858	MEM	EET NE	03/19/24 09:21

Client Sample ID: ATC-5 (0-5)

Date Collected: 03/14/24 14:25

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-17

Matrix: Solid

Percent Solids: 89.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	Frozen Preserve			32834	KFS	EET NE	03/14/24 15:00
Total/NA	Prep	5035			33086	CLR	EET NE	03/26/24 07:37
Total/NA	Analysis	8260C		1	33087	CLR	EET NE	03/26/24 18:07

Client Sample ID: ATC-5 (5-10)

Date Collected: 03/14/24 12:10

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-18

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	32858	MEM	EET NE	03/19/24 09:21

Client Sample ID: ATC-5 (5-10)

Date Collected: 03/14/24 12:10

Date Received: 03/18/24 15:25

Lab Sample ID: 620-17450-18

Matrix: Solid

Percent Solids: 92.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	Frozen Preserve			32834	KFS	EET NE	03/14/24 15:00
Total/NA	Prep	5035			33086	CLR	EET NE	03/26/24 07:37
Total/NA	Analysis	8260C		1	33087	CLR	EET NE	03/26/24 18:33

¹ This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET NE = Eurofins New England, 646 Camp Ave, North Kingstown, RI 02852, TEL (413)789-9018

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Eurofins New England

Accreditation/Certification Summary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Laboratory: Eurofins New England

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Massachusetts	State	M-RI907	06-30-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
6010D	3010A	Solid	Lead
6010D	3050B	Solid	Arsenic
6010D	3050B	Solid	Barium
6010D	3050B	Solid	Cadmium
6010D	3050B	Solid	Chromium
6010D	3050B	Solid	Lead
6010D	3050B	Solid	Selenium
6010D	3050B	Solid	Silver
7471A	7471B	Solid	Mercury
8082	3540C	Solid	PCB-1016
8082	3540C	Solid	PCB-1221
8082	3540C	Solid	PCB-1232
8082	3540C	Solid	PCB-1242
8082	3540C	Solid	PCB-1248
8082	3540C	Solid	PCB-1254
8082	3540C	Solid	PCB-1260
8082	3540C	Solid	PCB-1262
8082	3540C	Solid	PCB-1268
8100	3546	Solid	TEPH (C9-C36)
8260C	5035	Solid	1,1,1,2-Tetrachloroethane
8260C	5035	Solid	1,1,1-Trichloroethane
8260C	5035	Solid	1,1,2,2-Tetrachloroethane
8260C	5035	Solid	1,1,2-Trichloroethane
8260C	5035	Solid	1,1,2-Trichlorotrifluoroethane (Freon 113)
8260C	5035	Solid	1,1-Dichloroethane
8260C	5035	Solid	1,1-Dichloroethene
8260C	5035	Solid	1,1-Dichloropropene
8260C	5035	Solid	1,2,3-Trichlorobenzene
8260C	5035	Solid	1,2,3-Trichloropropane
8260C	5035	Solid	1,2,4-Trichlorobenzene
8260C	5035	Solid	1,2,4-Trimethylbenzene
8260C	5035	Solid	1,2-Dibromo-3-Chloropropane
8260C	5035	Solid	1,2-Dibromoethane (EDB)
8260C	5035	Solid	1,2-Dichlorobenzene
8260C	5035	Solid	1,2-Dichloroethane
8260C	5035	Solid	1,2-Dichloropropane
8260C	5035	Solid	1,3,5-Trichlorobenzene
8260C	5035	Solid	1,3,5-Trimethylbenzene
8260C	5035	Solid	1,3-Dichlorobenzene
8260C	5035	Solid	1,3-Dichloropropane
8260C	5035	Solid	1,3-Dichloropropene, Total
8260C	5035	Solid	1,4-Dichlorobenzene
8260C	5035	Solid	1,4-Dioxane
8260C	5035	Solid	2,2-Dichloropropane
8260C	5035	Solid	2-Butanone (MEK)

Accreditation/Certification Summary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Laboratory: Eurofins New England (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8260C	5035	Solid	2-Chlorotoluene
8260C	5035	Solid	2-Hexanone (MBK)
8260C	5035	Solid	4-Chlorotoluene
8260C	5035	Solid	4-Isopropyltoluene
8260C	5035	Solid	4-Methyl-2-pentanone (MIBK)
8260C	5035	Solid	Acetone
8260C	5035	Solid	Acrylonitrile
8260C	5035	Solid	Benzene
8260C	5035	Solid	Bromobenzene
8260C	5035	Solid	Bromochloromethane
8260C	5035	Solid	Bromodichloromethane
8260C	5035	Solid	Bromoform
8260C	5035	Solid	Bromomethane
8260C	5035	Solid	Carbon disulfide
8260C	5035	Solid	Carbon tetrachloride
8260C	5035	Solid	Chlorobenzene
8260C	5035	Solid	Chloroethane
8260C	5035	Solid	Chloroform
8260C	5035	Solid	Chloromethane
8260C	5035	Solid	cis-1,2-Dichloroethene
8260C	5035	Solid	cis-1,3-Dichloropropene
8260C	5035	Solid	Dibromochloromethane
8260C	5035	Solid	Dibromomethane
8260C	5035	Solid	Dichlorodifluoromethane (Freon 12)
8260C	5035	Solid	di-Isopropyl ether
8260C	5035	Solid	Ethanol
8260C	5035	Solid	Ethyl ether
8260C	5035	Solid	Ethyl tert-butyl ether
8260C	5035	Solid	Ethylbenzene
8260C	5035	Solid	Hexachlorobutadiene
8260C	5035	Solid	Isopropylbenzene
8260C	5035	Solid	m,p-Xylene
8260C	5035	Solid	Methyl tert-butyl ether
8260C	5035	Solid	Methylene Chloride
8260C	5035	Solid	Naphthalene
8260C	5035	Solid	n-Butylbenzene
8260C	5035	Solid	N-Propylbenzene
8260C	5035	Solid	o-Xylene
8260C	5035	Solid	sec-Butylbenzene
8260C	5035	Solid	Styrene
8260C	5035	Solid	Tert-amyl methyl ether
8260C	5035	Solid	tert-Butanol
8260C	5035	Solid	tert-Butylbenzene
8260C	5035	Solid	Tetrachloroethene
8260C	5035	Solid	Tetrahydrofuran
8260C	5035	Solid	Toluene
8260C	5035	Solid	trans-1,2-Dichloroethene

Eurofins New England

Accreditation/Certification Summary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Laboratory: Eurofins New England (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8260C	5035	Solid	trans-1,3-Dichloropropene
8260C	5035	Solid	trans-1,4-Dichloro-2-butene
8260C	5035	Solid	Trichloroethene
8260C	5035	Solid	Trichlorofluoromethane (Freon 11)
8260C	5035	Solid	Vinyl chloride
8260C	5035	Solid	Xylenes, Total
8270D	3546	Solid	1,2,4,5-Tetrachlorobenzene
8270D	3546	Solid	1,2,4-Trichlorobenzene
8270D	3546	Solid	1,2-Dichlorobenzene
8270D	3546	Solid	1,3-Dichlorobenzene
8270D	3546	Solid	1,4-Dichlorobenzene
8270D	3546	Solid	2,4,5-Trichlorophenol
8270D	3546	Solid	2,4,6-Trichlorophenol
8270D	3546	Solid	2,4-Dichlorophenol
8270D	3546	Solid	2,4-Dimethylphenol
8270D	3546	Solid	2,4-Dinitrophenol
8270D	3546	Solid	2,4-Dinitrotoluene
8270D	3546	Solid	2,6-Dinitrotoluene
8270D	3546	Solid	2-Chloronaphthalene
8270D	3546	Solid	2-Chlorophenol
8270D	3546	Solid	2-Methylphenol
8270D	3546	Solid	2-Nitroaniline
8270D	3546	Solid	2-Nitrophenol
8270D	3546	Solid	3 & 4 Methylphenol
8270D	3546	Solid	3,3'-Dichlorobenzidine
8270D	3546	Solid	3-Nitroaniline
8270D	3546	Solid	4,6-Dinitro-2-methylphenol
8270D	3546	Solid	4-Bromophenyl phenyl ether
8270D	3546	Solid	4-Chloro-3-methylphenol
8270D	3546	Solid	4-Chloroaniline
8270D	3546	Solid	4-Chlorophenyl phenyl ether
8270D	3546	Solid	4-Nitroaniline
8270D	3546	Solid	4-Nitrophenol
8270D	3546	Solid	Acetophenone
8270D	3546	Solid	Aniline
8270D	3546	Solid	Azobenzene/Diphenyldiazene
8270D	3546	Solid	Benzidine
8270D	3546	Solid	Benzoic acid
8270D	3546	Solid	Benzyl alcohol
8270D	3546	Solid	bis (2-chloroisopropyl) ether
8270D	3546	Solid	Bis(2-chloroethoxy)methane
8270D	3546	Solid	Bis(2-chloroethyl)ether
8270D	3546	Solid	Bis(2-ethylhexyl) phthalate
8270D	3546	Solid	Butyl benzyl phthalate
8270D	3546	Solid	Carbazole
8270D	3546	Solid	Dibenzofuran
8270D	3546	Solid	Diethyl phthalate

Eurofins New England

Accreditation/Certification Summary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Laboratory: Eurofins New England (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8270D	3546	Solid	Dimethyl phthalate
8270D	3546	Solid	Di-n-butyl phthalate
8270D	3546	Solid	Di-n-octyl phthalate
8270D	3546	Solid	Hexachlorobenzene
8270D	3546	Solid	Hexachlorobutadiene
8270D	3546	Solid	Hexachlorocyclopentadiene
8270D	3546	Solid	Hexachloroethane
8270D	3546	Solid	Isophorone
8270D	3546	Solid	Nitrobenzene
8270D	3546	Solid	N-Nitrosodimethylamine
8270D	3546	Solid	N-Nitrosodi-n-propylamine
8270D	3546	Solid	N-Nitrosodiphenylamine
8270D	3546	Solid	Pentachloronitrobenzene
8270D	3546	Solid	Pentachlorophenol
8270D	3546	Solid	Phenol
8270D	3546	Solid	Pyridine
8270D_LL_PAH	3546	Solid	1-Methylnaphthalene
8270D_LL_PAH	3546	Solid	2-Methylnaphthalene
8270D_LL_PAH	3546	Solid	Acenaphthene
8270D_LL_PAH	3546	Solid	Acenaphthylene
8270D_LL_PAH	3546	Solid	Anthracene
8270D_LL_PAH	3546	Solid	Benzo[a]anthracene
8270D_LL_PAH	3546	Solid	Benzo[a]pyrene
8270D_LL_PAH	3546	Solid	Benzo[b]fluoranthene
8270D_LL_PAH	3546	Solid	Benzo[g,h,i]perylene
8270D_LL_PAH	3546	Solid	Benzo[k]fluoranthene
8270D_LL_PAH	3546	Solid	Bis(2-ethylhexyl) phthalate
8270D_LL_PAH	3546	Solid	Chrysene
8270D_LL_PAH	3546	Solid	Dibenz(a,h)anthracene
8270D_LL_PAH	3546	Solid	Fluoranthene
8270D_LL_PAH	3546	Solid	Fluorene
8270D_LL_PAH	3546	Solid	Indeno[1,2,3-cd]pyrene
8270D_LL_PAH	3546	Solid	Naphthalene
8270D_LL_PAH	3546	Solid	Phenanthrene
8270D_LL_PAH	3546	Solid	Pyrene
9045D		Solid	pH
9045D		Solid	Temperature
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids
SM 2510B		Solid	Specific Conductance

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-24
A2LA	ISO/IEC 17025	0001.01	11-30-24

Eurofins New England

Accreditation/Certification Summary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alabama	State	43200	01-31-25
Alaska	State	PA00009	06-30-24
Alaska (UST)	State	17-027	02-28-25
Arizona	State	AZ0780	03-12-25
Arkansas DEQ	State	88-00660	08-09-24
California	State	2792	11-30-24
Colorado	State	PA00009	06-30-24
Connecticut	State	PH-0746	06-30-25
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-25
Delaware (DW)	State	N/A	01-31-25
Florida	NELAP	E87997	06-30-25
Georgia (DW)	State	C048	01-31-25
Hawaii	State	N/A	01-31-25
Illinois	NELAP	200027	01-31-25
Iowa	State	361	03-01-24 *
Kansas	NELAP	E-10151	10-31-24
Kentucky (DW)	State	KY90088	12-31-24
Kentucky (UST)	State	0001.01	11-30-24
Kentucky (WW)	State	KY90088	12-31-23 *
Louisiana (All)	NELAP	02055	06-30-24
Maine	State	2019012	03-12-25
Maryland	State	100	06-30-24
Massachusetts	State	M-PA009	06-30-24
Michigan	State	9930	01-31-25
Minnesota	NELAP	042-999-487	12-31-24
Mississippi	State	023	01-31-25
Missouri	State	450	01-31-25
Montana (DW)	State	0098	01-01-25
Nebraska	State	NE-OS-32-17	01-31-25
New Hampshire	NELAP	2730	01-10-25
New Jersey	NELAP	PA011	06-30-24
New York	NELAP	10670	03-31-24
North Carolina (DW)	State	42705	07-31-24
North Carolina (WW/SW)	State	521	12-31-24
Oklahoma	NELAP	9804	08-31-24
Oregon	NELAP	PA200001	09-11-24
Pennsylvania	NELAP	36-00037	01-28-25
Quebec Ministry of Environment and Fight against Climate Change	PALA	507	09-16-24
Rhode Island	State	LAO00338	12-30-24
South Carolina	State	89002	01-31-24 *
Tennessee	State	02838	01-31-25
Texas	NELAP	T104704194-23-46	08-31-24
USDA	US Federal Programs	525-22-298-19481	10-25-25
Vermont	State	VT - 36037	10-28-24
Virginia	NELAP	460182	06-14-25
Washington	State	C457	04-11-24
West Virginia (DW)	State	9906 C	01-31-25
West Virginia DEP	State	055	07-31-24
Wyoming	State	8TMS-L	01-31-25

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins New England

Accreditation/Certification Summary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Wyoming (UST)	A2LA	0001.01	11-30-24

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16

Method Summary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds (GC/MS)	MA DEP	EET NE
8270D	Semivolatile Organic Compounds (GC/MS)	MA DEP	EET NE
8270D_LL_PAH	Semivolatile Organic Compounds (GC/MS) Low level PAH	SW846	EET NE
8082	Polychlorinated Biphenyls (GC/ECD)	MA DEP	EET NE
8100	Polynuclear Aromatic Hydrocarbons (PAHs) (GC)	SW846	EET NE
6010D	Metals (ICP)	SW846	EET NE
7471A	Mercury (CVAA)	SW846	EET NE
1010A	Ignitability, Pensky-Martens Closed-Cup Method	SW846	ELLE
9012	Cyanide, Reactive	SW846	ELLE
9034	Sulfide, Reactive	SW846	ELLE
9045D	pH	SW846	EET NE
9060	Organic Carbon, Total (TOC)	SW846	ELLE
Moisture	Percent Moisture	EPA	EET NE
SM 2510B	Conductivity, Specific Conductance	SM	EET NE
1311	TCLP Extraction	SW846	EET NE
3010A	Preparation, Total Metals	SW846	EET NE
3050B	Preparation, Metals	SW846	EET NE
3540C	Soxhlet Extraction	SW846	EET NE
3546	Microwave Extraction	SW846	EET NE
5035	Closed System Purge and Trap	SW846	EET NE
7.3.3	Cyanide, Reactive	SW846	ELLE
7.3.4	Sulfide, Reactive	SW846	ELLE
7471B	Preparation, Mercury	SW846	EET NE
DI Leach	Deionized Water Leaching Procedure	ASTM	EET NE
Frozen Preserve	Freezing Samples	None	EET NE

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

MA DEP = Massachusetts Department Of Environmental Protection

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET NE = Eurofins New England, 646 Camp Ave, North Kingstown, RI 02852, TEL (413)789-9018

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: Atlas Technical Consultants LLC
Project/Site: Tufts Street Improvement - Somerville, M

Job ID: 620-17450-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
620-17450-1	ATC-3 (0-5)	Solid	03/15/24 09:10	03/18/24 15:25
620-17450-2	ATC-3 (5-10)	Solid	03/15/24 09:30	03/18/24 15:25
620-17450-3	ATC-2 (0-5)	Solid	03/15/24 10:15	03/18/24 15:25
620-17450-4	ATC-2 (5-10)	Solid	03/15/24 11:00	03/18/24 15:25
620-17450-5	ATC-1 (0-5)	Solid	03/15/24 11:20	03/18/24 15:25
620-17450-6	ATC-1 (5-10)	Solid	03/15/24 11:30	03/18/24 15:25
620-17450-7	Comp (0-5)	Solid	03/15/24 12:00	03/18/24 15:25
620-17450-8	Comp (5-10)	Solid	03/15/24 12:15	03/18/24 15:25
620-17450-9	ATC-8 (0-5)	Solid	03/14/24 10:00	03/18/24 15:25
620-17450-10	ATC-8 (5-10)	Solid	03/14/24 11:50	03/18/24 15:25
620-17450-11	ATC-7 (0-5)	Solid	03/14/24 11:10	03/18/24 15:25
620-17450-12	ATC-7 (5-10)	Solid	03/14/24 12:10	03/18/24 15:25
620-17450-13	ATC-6 (0-5)	Solid	03/14/24 12:30	03/18/24 15:25
620-17450-14	ATC-6 (5-10)	Solid	03/14/24 12:45	03/18/24 15:25
620-17450-15	ATC-4 (0-5)	Solid	03/14/24 13:40	03/18/24 15:25
620-17450-16	ATC-4 (5-10)	Solid	03/14/24 13:55	03/18/24 15:25
620-17450-17	ATC-5 (0-5)	Solid	03/14/24 14:25	03/18/24 15:25
620-17450-18	ATC-5 (5-10)	Solid	03/14/24 12:10	03/18/24 15:25



620-17450 Chain of Custody

alytical

CHAIN OF CUSTODY RECORD

Page 1 of 2

Special Handling:

- ☒ Standard TAT - 7 to 10 business days
☐ Rush TAT - Date Needed _____

All TATs subject to laboratory approval
Min 24-hr notification needed for rushes
Samples disposed after 30 days unless otherwise instructed.

Report To Atlas Technical Consultants LLC
10 State Street, Suite 100
Woburn, MA 01801

Telephone # 781-404-1431
Project Mgr Stephan Landry

Invoice To Atlas

P O No _____ Quote # _____

Project No 6000007464

Site Name Tufts Street Improvement

Location Tufts St., Somerville MA
Sampler(s) Eric Marchese

State MA

F=Field Filtered 1=Na₂SO₄ 2=HCl 3=H₂SO₄ 4=HNO₃ 5=NaOH 6=Ascorbic Acid
7=CH₃OH 8=NaHSO₄ 9=Deionized Water 10=H₃PO₄ 11= iced 12=

DW=Drinking Water GW=Groundwater SW=Surface Water WW=Waste Water
O=Oil SO=Soil SL=Sludge A=Indoor/Ambient Air SG=Soil Gas

X1= _____ X2= _____ X3= _____

List Preservative Code below:

QA/QC Reporting Notes:
* additional charges may apply

Containers

Analysis

Check if chlorinated

MA DEP MCP CAM Report? ☐ Yes ☐ No
CT DPH RCP Report? ☐ Yes ☐ No
☒ Standard ☐ No QC
☐ ASP A* ☐ ASP B*
☐ INJ Reduced* ☐ INJ Full*
☐ Tier II* ☐ Tier IV*
☐ Other MassDEPS-I
State-specific reporting standards

Lab ID:	Sample ID:	Date:	Time:	Type	Matrix	Containers				Analysis							Check if chlorinated
						# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	8260 Low Level	50C Low Level	50C High Level	TPH & total	TPH & Pb	TPH & Cu	TPH & Zn	
-1	ATC-3 (0-5)	3/15/24	0910	✓	SP	3	1	1	1	X			TPH & total	TPH & Pb	TPH & Cu	TPH & Zn	
-2	ATC-3 (5-10)		0930	✓	SP	1	1	1	1				TPH & total	TPH & Pb	TPH & Cu	TPH & Zn	
-3	ATC-2 (0-5)		1015	✓	SP	1	1	1	1				TPH & total	TPH & Pb	TPH & Cu	TPH & Zn	
-4	ATC-2 (5-10)		1100	✓	SP	1	1	1	1				TPH & total	TPH & Pb	TPH & Cu	TPH & Zn	
-5	ATC-1 (0-5)		1120	✓	SP	1	1	1	1				TPH & total	TPH & Pb	TPH & Cu	TPH & Zn	
-6	ATC-1 (5-10)		1130	✓	SP	1	1	1	1				TPH & total	TPH & Pb	TPH & Cu	TPH & Zn	
-7	comp (0-5)		1200	✓	SP	4	4	4	4				TPH & total	TPH & Pb	TPH & Cu	TPH & Zn	
-8	comp (5-10)		1215	✓	SP	4	4	4	4				TPH & total	TPH & Pb	TPH & Cu	TPH & Zn	

Relinquished by:

Received by:

Temp °C

EDD format:

E-mail to

Stephan Landry

ATC-3 (0-5)

3/15/24

1500

Observed

Stephan.Landry@oneatlas.com

Stephan.Landry@oneatlas.com

3/15/24

Stephan Landry

ATC-3 (0-5)

3/15/24

1500

Observed

Stephan.Landry@oneatlas.com

Stephan.Landry@oneatlas.com

3/15/24

Stephan Landry

ATC-3 (0-5)

3/15/24

1500

Observed

Stephan.Landry@oneatlas.com

Stephan.Landry@oneatlas.com

3/15/24

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken

☐ Ambient ☐ Iced ☒ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen



Spectrum Analytical

CHAIN OF CUSTODY RECORD

Special Handling:
☒ Standard TAT - 7 to 10 business days
☐ Rush TAT - Date Needed _____
All TATs subject to laboratory approval
Min 24-hr notification needed for rushes
Samples disposed after 30 days unless otherwise instructed.

Page 2 of 2

Report To Atlas Technical Consultants LLC
10 State Street, Suite 100
Woburn, MA 01801

Telephone # 781-404-1431
Project Mgr Stephan Landry

Invoice To Atlas
P O No _____ Quote # _____
11= iced 12=

Project No 6000007464
Site Name Tufts Street Improvement
Location Tufts St, Somerville MA State MA
Sampler(s) Eric Marchese

F=Field Filtered 1=Na₂S₂O₃ 2=HCl 3=H₂SO₄ 4=HNO₃ 5=NaOH 6=Ascorbic Acid
7=CH₃OH 8=NaHSO₄ 9=Deionized Water 10=H₃PO₄ 11= iced 12=

DW=Drinking Water GW=Groundwater SW=Surface Water WW=Waste Water
O=Oil SO=Soil SL=Sludge A=Indoor/Ambient Air SG=Soil Gas
X1= X2= X3=

List Preservative Code below:

QA/QC Reporting Notes:
* additional charges may apply

MA DEP MCP CAM Report? ☒ Yes ☐ No
CT DPH RCP Report? ☐ Yes ☒ No
☒ Standard ☐ No QC
☐ DQA* ☐ ASP B*
☐ ASP A* ☐ NJ Reduced*
☐ NJ Full* ☐ Tier IV*
☐ Tier II* ☐ Other: Mass DEP S-1
☒ State-specific reporting standards

Containers

Analysis

Check if chlorinated

Lab ID:	Sample ID:	Date:	Time:	Type:	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	8260 Low Level	Temp °C
-9	ATC-9 (0-5)	3/14/24	1000	G SG	3			1	X	Observed 4.2
-10	ATC-8 (5-10)		1150		1			1		Corrected 4.2
-11	ATC-7 (0-5)		1110		1			1		Corrected 4.4
-12	ATC-7 (5-10)		1310		1			1		IR ID# 6
-13	ATC-6 (0-5)		1230		1			1		
-14	ATC-6 (5-10)		1245		1			1		
-15	ATC-64 (0-5)		1340		1			1		
-16	ATC-4 (5-10)		1355		1			1		
-17	ATC-5 (0-5)		1425		1			1		
-18	ATC-5 (5-10)		1510		1			1		

Relinquished by: Eric Marchese Received by: Atlas Fringe
E-mail to: Stephan.Landry@oneatlas.com
E-mail to: Stephan.Landry@oneatlas.com

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☐ Ambient ☐ Iced ☒ Refrigerated ☒ DI VOA Frozen ☐ Soil Jar Frozen

Environment Testing

mb

Login Sample Receipt Checklist

Client: Atlas Technical Consultants LLC

Job Number: 620-17450-1

Login Number: 17450

List Number: 1

Creator: Scott, Krishnan F

List Source: Eurofins New England

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Atlas Technical Consultants LLC

Job Number: 620-17450-1

Login Number: 17450

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

List Number: 2

List Creation: 03/19/24 12:15 PM

Creator: Ballard, Megan

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable, where thermal pres is required ($\leq 6^{\circ}\text{C}$, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temp acceptable, where thermal pres is required ($\leq 6^{\circ}\text{C}$, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace $> 6\text{mm}$ in diameter (none, if from WV)?	N/A	



Massachusetts Department of Environmental Protection

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Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

**UTILITY-RELATED ABATEMENT MEASURE (URAM)
TRANSMITTAL FORM**

Pursuant to 310 CMR 40.0462 - 0465 (Subpart D)

BWSC 119

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Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

**UTILITY-RELATED ABATEMENT MEASURE (URAM)
TRANSMITTAL FORM**

Pursuant to 310 CMR 40.0462 - 0465 (Subpart D)

BWSC 119

Release Tracking Number

3

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Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

**UTILITY-RELATED ABATEMENT MEASURE (URAM)
TRANSMITTAL FORM**

Pursuant to 310 CMR 40.0462 - 0465 (Subpart D)

BWSC 119

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Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

**UTILITY-RELATED ABATEMENT MEASURE (URAM)
TRANSMITTAL FORM**

Pursuant to 310 CMR 40.0462 - 0465 (Subpart D)

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Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

**UTILITY-RELATED ABATEMENT MEASURE (URAM)
TRANSMITTAL FORM**

Pursuant to 310 CMR 40.0462 - 0465 (Subpart D)

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